



Weber, Hayes & Associates
Hydrogeology and Environmental Engineering

120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

November 1, 2005
Project # 22029.Q

Ms. Judy Cox
21389 Boyle Road
Palo Cedro, CA 96703

Subject: Semi-Annual Groundwater Monitoring Report - Fall 2005
Case Closure Recommendation & Summary Documentation
C & N Tractors - 496 Salinas Road, Watsonville, California

Dear Ms. Cox,

This report presents a summary of groundwater monitoring activities conducted in the fourth quarter 2005, and a Case Closure recommendation for the former gasoline fuel tank and waste oil tank at C and N Tractors, 496 Salinas Road, Watsonville, California (Location Map, Figure 1).

Three consecutive rounds of groundwater monitoring at the site confirms that the aged gasoline plume in groundwater is stable and is naturally attenuating. At this time we recommend site closure with no further action for the groundwater investigation at this site, following proper destruction of all site monitoring wells.

Additionally, we note that a properly closed waste oil tank with clean soil and water samples and full documentation of closure (from 1989) at the site has never received written regulatory notice that no further action is required. This waste oil UST was properly excavated and removed from the site under permit in 1989. Tested soil and groundwater at this location during our 1997 Phase I/II Site Assessment activities revealed no significant hydrocarbon impacts at the tank site (see Appendix C). To properly document the completion of this waste oil tank closure, we request written notice from Monterey County that no further action is required for this former waste oil tank.

Semi-annual groundwater monitoring near a former gasoline UST has been required by the California Regional Water Quality Control Board (Regional Board) pursuant to a historic release of petroleum hydrocarbons to groundwater at the site. The current round of groundwater testing concludes one year of semi-annual groundwater monitoring requirements. This report includes descriptions of field methodologies, a tabular summary of groundwater elevations and dissolved petroleum hydrocarbon (PHC) concentrations, and figures showing the current PHC concentrations and groundwater elevations.

EXECUTIVE SUMMARY

Former Gasoline UST: The primary purpose of this report is to document the results of sampling and request closure for a groundwater monitoring network installed around an old petroleum

hydrocarbon (PHC) release, which originated from an small underground storage tank (UST) removed from the site in 1987. Semi-annual groundwater monitoring is being conducted in accordance with the Regional Board's letter dated March 18, 2005. Field operations included groundwater testing of the sites' four-well network. The results indicate a small plume fingerprinted as "aged" gasoline has impacted shallow groundwater at the site in the immediate vicinity of the former UST location. Due to the age (the tank was removed 18 years ago) and limited amount of the release, dissolved BTEX and TPH compounds are almost gone.

Laboratory analysis of ground water yielded few contaminant concentrations exceeding the California Regional Water Quality Control Board's (CRWQCB) water quality goals. Specifically, the groundwater samples contained:

- TPH-gasoline was detected in well MW-1, situated immediately downgradient of the former UST, at a concentration of 65 parts per billion (ppb); well below regulatory thresholds. This detection is the lowest ever detected in this well since monitoring began in February 1988. The general water quality goals for TPH- gasoline is set at 1000 ppb.
- MTBE was detected in one of four wells (well MW-4) at concentrations marginally exceeding the water quality goal. Specifically, water collected from MW-4 contained MTBE at a concentrations of 11 ppb, which exceeds the water quality goal of 5 ppb. MTBE was not detected in any other well this quarter. The low-level detection of MTBE is believed to originate from a local surface spill of gasoline in the yard area (since MTBE has never been detected in well MW1, closest to the former tank), and is not considered a significant groundwater plume.

No BTEX contaminant compounds were detected in any of the monitoring wells during the current sampling event.

Three consecutive rounds of groundwater monitoring at the site confirm that the aged gasoline plume in groundwater is small, without volatiles, low to non-detectable in remaining concentrations, and is naturally attenuating. The small size of the plume and lack of volatile compounds (BTEX) and the low-level TPH concentrations are common for small, old releases that have attenuated by decades of biodegradation and/or soil vapor volatilization. On this basis, this case should be considered low risk. No further monitoring is required to protect groundwater quality, human health or the environment.

Former Waste Oil UST: A 550 gallon underground waste oil storage tank was documented to be properly closed at the site in 1989. During our Phase I/II Site Assessment activities conducted at the site in 1997 a single soil boring was advanced just downgradient of this waste oil UST to address any potential environmental issues associated with its use (*Weber, Hayes and Associates*, April 14, 1997). A single soil sample (BH-1) collected at a depth of 10 feet below ground surface at this location yielded no detections of contaminants. A groundwater sample collected at this location contained only a trace detection of motor oil at 80 ppb, well below the non-established water quality

goals for this contaminant set at 1,000 ppb. **We conclude that there is no environmental liability associated with the former waste oil UST.** Supporting documentation in this report includes a UST closure application, a Site Map depicting the boring location in relation to the former waste oil UST, and a laboratory Certificate of Analysis from soil and water sampling.

Recommendations: **Based on the small size of the plume, the lack of volatile compounds (BTEX), and the low-level TPH concentrations, we recommend site closure with no further action for the groundwater investigation at this site, following proper destruction of all site monitoring wells.**

Additionally, we recommend that Monterey County provide a brief written acknowledgment that no further action is required for the former waste oil UST which was properly closed at the site in 1988.

PURPOSE AND SCOPE

This report describes groundwater monitoring activities conducted by Weber, Hayes and Associates during the fourth quarter 2005 at the C & N Tractors facility, 496 Salinas Road, Watsonville, CA (Figure 1). These activities are required by the California Regional Water Quality Control Board, Central Coast Region (Regional Board) pursuant to a release of petroleum hydrocarbons from an underground storage tank system at the site.

This report includes descriptions of groundwater monitoring field methodologies, a tabular summary of groundwater elevations and dissolved hydrocarbon concentrations, and figures showing the current groundwater elevations and flow direction and hydrocarbon concentrations.

Groundwater monitoring activities conducted during this quarter included:

- Measuring depth-to-groundwater and dissolved oxygen concentration in all four wells.
- Collecting groundwater samples from all site monitoring wells, and submitting the samples to a State-certified laboratory for analyses.
- Properly disposing of the groundwater purged prior to sampling the monitoring wells.
- Calculating groundwater elevations and flow direction at the site, compiling water quality data, and preparing this technical report describing the subsurface conditions beneath the site.

SITE DESCRIPTION

The subject site is located at 496 Salinas Road, in the community of Pajaro, north Monterey County, in an area of mixed land use ranging from residential to food processing and agricultural development. Major features of the area include the Southern Pacific railroad yard on Salinas Road opposite the subject property, a rail line adjacent to the subject property, and the Pajaro River to the north west. Areas to the south and west of the site are agricultural fields. Commercial properties and some residential neighborhoods are present to the north.

The site itself is a flat-lying commercial property that contains the offices, warehouses, and storage yards of C&N Tractor, a tractor sales and rental business. The parcel contains three building which include a sales office (northern warehouse), an equipment repair shop (central structure), and a fabrication building (southern warehouse). The remaining portion of the site is asphalt covered and used for parking and the display of tractor and equipment (see Site Map, Figure 2). There are no existing underground fuel storage tanks on the property.

Shallow Soil and Groundwater Conditions

This site is located on the flood plain of the Pajaro Valley, approximately 8,000 feet south and east of the main channel of the Pajaro River, the major surface drainage for the region (see topographic map, Figure 1). Geologic mapping by William Dupre of the USGS (1975) shows the site to be underlain by Quaternary-age Older Flood-Plain Deposits and described as fine-grained deposits of sand, silt and clay with a total thickness of more than 200 feet. A 50-foot thick gravel layer at the base of these deposits is a significant local aquifer, producing up to 500 gpm to agricultural wells in the Pajaro Valley (Muir, 1972).

Weber, Hayes and Associates conducted a Shallow Soil and Groundwater Assessment at the site on June 19, 2003 (*Weber, Hayes and Associates*, October 3, 2003). Drill logs from six, continuously-cored exploratory borings positioned within a 60'x 60' section of the site showed : 1) groundwater was consistently encountered at a depth of 7 feet, and 2) the shallow soils contained relatively continuous stratigraphy which included shallow fill (approximately 2-3 feet); underlain by a shallow clay unit (approx 2-feet thick), which was underlain by a saturated unit of silty-sand (approx. 4-6 feet thick), which was underlain by a clay unit (>2 feet thick). Review of groundwater elevation data from the 8-well monitoring network located across Salinas Road indicates shallow groundwater flow direction is toward the west and can fluctuate up to six feet in elevation between the winter and summer seasons (7.5-to-13.5 feet below ground surface)¹.

Weber, Hayes and Associates' March 27, 2005 well installation activities confirmed our previous investigation of subsurface conditions at the site. Shallow soils underlying the previous terminated boring depths of 12 feet bgs consisted of interbedded clay to clayey-silt units to a total depth of

¹: Monitoring reports for Union Pacific Railroad Yard, 499 Salinas Road, Pajaro, dated 1996-2001.

investigation at 20 feet bgs. Groundwater during this investigation was consistently encountered at a depth of 5 feet bgs.

Previous Environmental Investigations

There are currently no existing underground storage tanks (USTs) on the site. A 550-gallon gasoline storage tank was removed in April 1987 under a permit from Monterey County Health Department (MCHD). Sidewall soil samples obtained following UST-removal and over-excavation of approximately 100 cubic yards of fuel-impacted soils contained moderate levels of gasoline contamination (<330 mg/kg, parts per million). The tank pit was backfilled and a single monitoring well (MW-1) was installed immediately adjacent to the former UST location. A 550-gallon waste oil UST was removed from the site in 1989 under a permit from Monterey County Health Department (MCHD). Subsequent sampling of soil and groundwater at the former waste oil UST location revealed no significant detections of contaminants.

Groundwater was initially sampled from the well in March and December 1988 and contained relatively low gasoline compounds. The 14-foot deep well was gauged to be dry in June and July 1989 and was not sampled again until March 1997, as part of a Phase I/II property assessment². A sample was also obtained in December 1998 at the request of the CRWQCB (directive dated November 25, 1998). All previous groundwater test results are summarized in Table 1, along with current data.

Groundwater has generally been encountered at a depth of 7-8 feet. Lab results indicate that groundwater in this well has contained relatively low concentrations of dissolved gasoline and the constituent gas compounds (benzene, toluene, ethylbenzene and xylenes, BTEX). However, concentrations of dissolved gasoline and the constituent compound benzene slightly exceeded regulatory water quality objectives in water samples prior to 1998 (see Table 1).

Weber, Hayes and Associates observed the installation of three additional groundwater monitoring wells at the site on January 27, 2005 (*Weber, Hayes and Associates*, March 9, 2005). MW-2 was positioned to delineate the up-to-eastern side gradient extent of petroleum hydrocarbon contamination and to confirm that no upgradient plumes are contributing to the known sources of contamination. MW-3 was installed 75 feet west (down gradient to side gradient) of the former gasoline UST. This well will monitor the down gradient-lateral edge of the historic gasoline release. MW-4 was installed approximately 115 feet downgradient from the former gasoline tank. We saw-cut through the foundation floor and installed the well at an accessible location near the southern end of the existing warehouse.

²: Weber, Hayes and Associates report: *Phase I & II Environmental Site Assessment, 496-498 Salinas Road, Watsonville*, dated April 14, 1997.

The soil results from the January 27, 2005 monitoring well installation, and groundwater results following the well installation confirmed that the historic release of petroleum hydrocarbons to soil and groundwater is small, limited to very low concentrations in one of four wells, and has naturally attenuated. This conclusion is based on the lack of volatile compounds (BTEX) and the low-level TPH concentrations detected in soil and groundwater which are common for old releases that have attenuated by biodegradation and/or soil vapor volatilization.

SUMMARY OF SEMI-ANNUAL GROUNDWATER MONITORING ACTIVITIES

Groundwater Monitoring

The fourth quarter 2005 groundwater monitoring event took place on October 19, 2005. Fieldwork was conducted according to our standard operating procedures for groundwater monitoring which are described in Appendix A. Field data sheets are also presented in Appendix A. Groundwater samples were collected from monitoring wells MW-1 through 4 at the site and delivered to a State-certified laboratory (Entech Analytical Labs, Inc. CA ELAP# 2346) under proper chain-of-custody documentation. The groundwater samples were analyzed for TPH-g by GC / MS, for BTEX and the fuel oxygenate MTBE by EPA Method 8260B.

Groundwater Elevation Data

Each monitoring well's depth to groundwater was measured and recorded on field notes (Appendix B). Based on the data acquired, the hydraulic gradient at the site is on the order of 0.001 feet per foot in a southwesterly direction (Figure 2). The groundwater flow direction measured during this groundwater monitoring event is consistent with that of the local groundwater flow direction, believed to be in a southwesterly direction. The flow direction measured this quarter is contrary to that of the previous two sampling events. Groundwater flow direction in the previous two groundwater monitoring events flowed in an easterly direction. We note that the groundwater gradient measured at this site is extremely flat (approximately 1/2 foot per 500 lateral feet), and that the gradient may be subject to reversals. The current groundwater flow direction at the site places "clean well" MW-4 down-to-side gradient of the former UST location.

We note that the top of casing elevation reported by McGregor Land Surveys in our March 9, 2005 report was erroneous. McGregor Land Surveys has recently reported to us that the top of casing elevation for well MW-1 is actually 25.24 feet, NAVD 88, and not 25.47 feet, NAVD 88, a difference of 0.23 feet in elevation.

Groundwater Analytical Results

The groundwater analytical results for the fourth quarter 2005 are summarized in the table below and on Figure 2. Groundwater analytical data collected by Weber, Hayes, and Associates at the site is summarized in Table 1. The laboratory's Certificate of Analysis is presented as Appendix B. All

quality assurance / quality control surrogates recoveries, spikes, and duplicates were within acceptable limits.

Groundwater Sample Analytical Results - October 19, 2005

All results are in parts per billion (: g/L)

Well I.D.	<i>Total Petroleum Hydrocarbons</i>	<i>Volatile Organic Compounds</i>				
	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MtBE
MW-1	65	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	11
AL's/MCL's	1000	1	150	300	1750	5

ND: Not Detected

Based on the laboratory analytical results, all of the monitoring well groundwater samples obtained indicate that the groundwater plume appears to be relatively small, stable and naturally attenuating. These findings are based on the following;

- < The plume is naturally attenuating based on the lack of volatile compounds (BTEX) and the low-level TPH concentration in well MW-1, which is common for old releases that have attenuated by biodegradation and/or soil vapor volatilization. This detection of TPH-g in well MW-1 is the lowest ever detected in this well since monitoring began in February 1988.
- < The low level detections of MtBE in well MW-4 is believed to be a stray detection originated from a minor surface spill, and is not considered significant. There is no pattern of widespread or concentrated MTBE in groundwater at the site. There is no MTBE in wells closer to the former tank site.

FORMER WASTE OIL UST

A 550 gallon underground waste oil tank was properly closed under Monterey County permit at the site in 1989. During our Phase I/II Site Assessment activities conducted at the site in 1997, a soil boring was advanced just downgradient of this waste oil UST to address any potential environmental issues associated with its use (*Weber, Hayes and Associates*, April 14, 1997). A single soil sample (BH-1) collected at a depth of 10 feet below ground surface at this location yielded no detections of contaminants. A groundwater sample collected at this location contained only a trace detection of motor oil at 80 ppb, well below the non-established water quality goal for this contaminant set at 1,000 ppb. **We conclude that there is no environmental liability associated with the former**

waste oil UST. Supporting documentation presented in Appendix C includes a UST closure application, a Site Map depicting the boring location in relation to the former waste oil UST, and laboratory Certificate of Analysis.

CONCLUSIONS

Consecutive rounds of groundwater monitoring at the site confirm that the small, aged gasoline plume in groundwater has almost completely attenuated after over 18 years since the tank was removed. The small size of the plume and lack of volatile compounds (BTEX) and the low-level TPH concentrations are common for small, old releases that have attenuated by biodegradation and/or soil vapor volatilization. On this basis, this case should be considered low risk, and no further groundwater monitoring should be required.

RECOMMENDATIONS

At this time we recommend site closure with no further action for the groundwater investigation at this site, following proper destruction of all site monitoring wells.

Additionally, we also recommend that no further action be required for the former waste oil UST which was properly closed at the site in 1988.

A Case Closure Summary Report, using the CRWQCB LUST program format has been completed, and is included with this report as Appendix D.

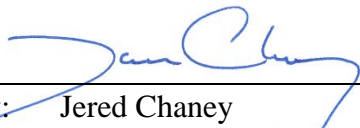
LIMITATIONS

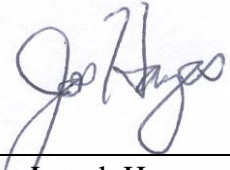
Our service consists of professional opinions and recommendations made in accordance with generally accepted geologic principles and practices. This warranty is in lieu of all others, either expressed or implied. The analysis and conclusions in this report are based on sampling and testing which are necessarily limited. Additional data from future work may lead to modifications of the options expressed herein.

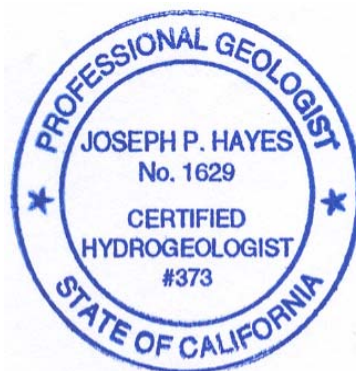
Thank you for this opportunity to be of service. Should you have any questions or comments regarding this project, please contact us at our office.

Respectfully submitted,

Weber, Hayes and Associates


By: Jered Chaney
Staff Geologist


And: Joseph Hayes
Certified Engineering Geologist #1629
Certified Hydrogeologist #373



cc:

California Regional Water Quality Control
Board, Central Coast Region
Mr. John Goni, Case Officer
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906

Monterey County Department of Health,
Division of Environmental Health
**Mr. Robert Fernandez, Hazardous
Materials Specialist II**
1270 Natividad Road
Salinas, California 93906-3198

Attachments:

Table 1: Summary of Groundwater Elevation and Analytical Data

Figure 1: Location Map

Figure 2: Groundwater Monitoring Results

Appendix A: Standard Operating Procedure - Monitoring Well Sampling & Field Data
Sheets

Appendix B: Certificates of Analysis and Chain-of-Custody Documentation -
Groundwater Samples

Appendix C: Former Waste Oil UST Closure Application, Site Map, and Certificate
of Analysis (BH-1) - Previously submitted in Weber, Hayes and
Associates *Phase I and II Environmental Site Assessment* dated April 14,
1997

Appendix D: Case Closure Summary Report

REFERENCES

California Regional Water Quality Control Board - Central Coast Region Correspondence: UST:
C & N Tractors, 496 Salinas Road, Watsonville (Pajaro), Monterey County:

Notice of Responsibility & Request for Investigation, October 4, 2002.

Response to Work Plan, May 22, 2003.

Response to Work Plan, September 27, 2004.

Response to Well Installation and Sampling Report (RWQCB Case 3675), March 18, 2005.

Weber Hayes and Associates Reports for C & N Tractors 496-498 Salinas Road, Watsonville,
California:

Phase I & II Environmental Site Assessment, April 14, 1997.

Workplan for Soil and Groundwater Characterization, April 11, 2003.

*1. Summary Report: Shallow Soil and Groundwater Assessment Report, 2. Workplan:
Installation of a Shallow Groundwater Monitoring Network*, October 3, 2003.

Monitoring Well Installation, Development, and Sampling Report, March 9, 2005.

Semi-Annual Groundwater Monitoring Report - Spring 2005, May 3, 2005.

TABLES

Table 1
Summary of Groundwater Elevation and Analytical Data
C & N Tractors - 496 & 498 Salinas Road, Watsonville, California
Weber, Hayes and Associates

Monitoring Point Information			Date Sampled	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, NGVD)	Petroleum Hydrocarbon Concentration Data						Field Measurements		
Well I.D.	TOC Elevation (feet, NGVD)	Screen Interval (feet, bgs)				Total Petroleum Hydrocarbons	Volatile Organic Compounds					Dissolved Oxygen (mg/L)	Redox Potential (ORP) (mV)	
							Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)			MTBE (ug/L)
MW-1	Δ 25.24	?? - 14'												
			10/19/05	7.94	17.30	65	ND	ND	ND	ND	ND	0.14	15	
			4/12/05	4.27	20.97	**300	ND	0.51	7.5	5.6	ND	0.20	89	
			1/27/05	4.36	20.88	**1,000	ND	ND	22	19	ND	0.14	224	
			9/19/04	7.20	18.04	ND	ND	ND	ND	ND	ND	5.55	-113	
			Dec-98	--	--	5,000	13	16	100	280	< 2.5	--	--	
			Mar-97	--	--	7,500	28	< 25	330	1,200	< 250	--	--	
			Dec-88	--	--	1,100	6.5	28	12	100	--	--	--	
			Feb-88	--	--		840	31	35	8.7	47	--	--	--
MW-2	25.32	5 - 20												
			10/19/05	8.01	17.31	ND	ND	ND	ND	ND	ND	0.12	105	
			4/12/05	4.49	20.83	ND	ND	ND	ND	ND	***7.5	0.13	73	
			1/27/05	4.57	20.75	ND	ND	ND	ND	ND	6.3	0.78	35	
MW-3	25.39	4 - 19												
			10/19/05	8.19	17.20	ND	ND	ND	ND	ND	ND	0.16	137	
			4/12/05	4.20	21.19	ND	ND	ND	ND	ND	ND	0.21	131	
			1/27/05	4.21	21.18	**27	ND	ND	ND	ND	ND	1.4	0.48	244
MW-4	26.38	5 - 20												
			10/19/05	9.23	17.15	ND	ND	ND	ND	ND	ND	11	0.12	133
			4/12/05	5.23	21.15	ND	ND	ND	ND	ND	ND	***7.6	0.14	124
			1/27/05	5.28	21.10	ND	ND	ND	ND	ND	ND	8.2	0.18	292
Practical Quantitation Limit:						25 / *50	0.5	0.5	0.5	0.5	1	--	--	
Action Levels (ALs) / Maximum Contaminant Levels (MCLs) ¹						1000	1	150	300	1750	5	--	--	

NOTES:

TOC : Top of Casing elevation surveyed by a Licensed Surveyor to National Geodetic Vertical Datum of 1988 (NGVD).

bgs : below ground surface.

ug/L : micrograms per liter - parts per billion.

ND : Not Detected at or above the laboratory's practical quantitation limit (PQL).

BOLD PRINT : Bold Print indicates concentrations are above regulatory Action Levels or MCL's.

* : Laboratory indicates analytical results within quantitation range, but the chromatographic pattern was not the specified fuel.

1: Levels presented are based on either the established Maximum Contaminant Levels (MCLs) which are the California Code of Regulations (Title 22) or water quality goals for the Central Coast Region of the CRWQCB.

♦ : Due to the low level detections of contaminants during the January 27, 2005 sampling event, samples collected on April 14, 2005 were analyzed by EPA Methods 8015M & 8020, and as a result the detection limit for TPH-g is elevated to 50 ppb.

TPH-g: Total Petroleum Hydrocarbons as gasoline

MTBE: Methyl Tert Butyl Ether.

< X: Not Detected at the elevated PQL, X, PQL elevated due to sample dilution.

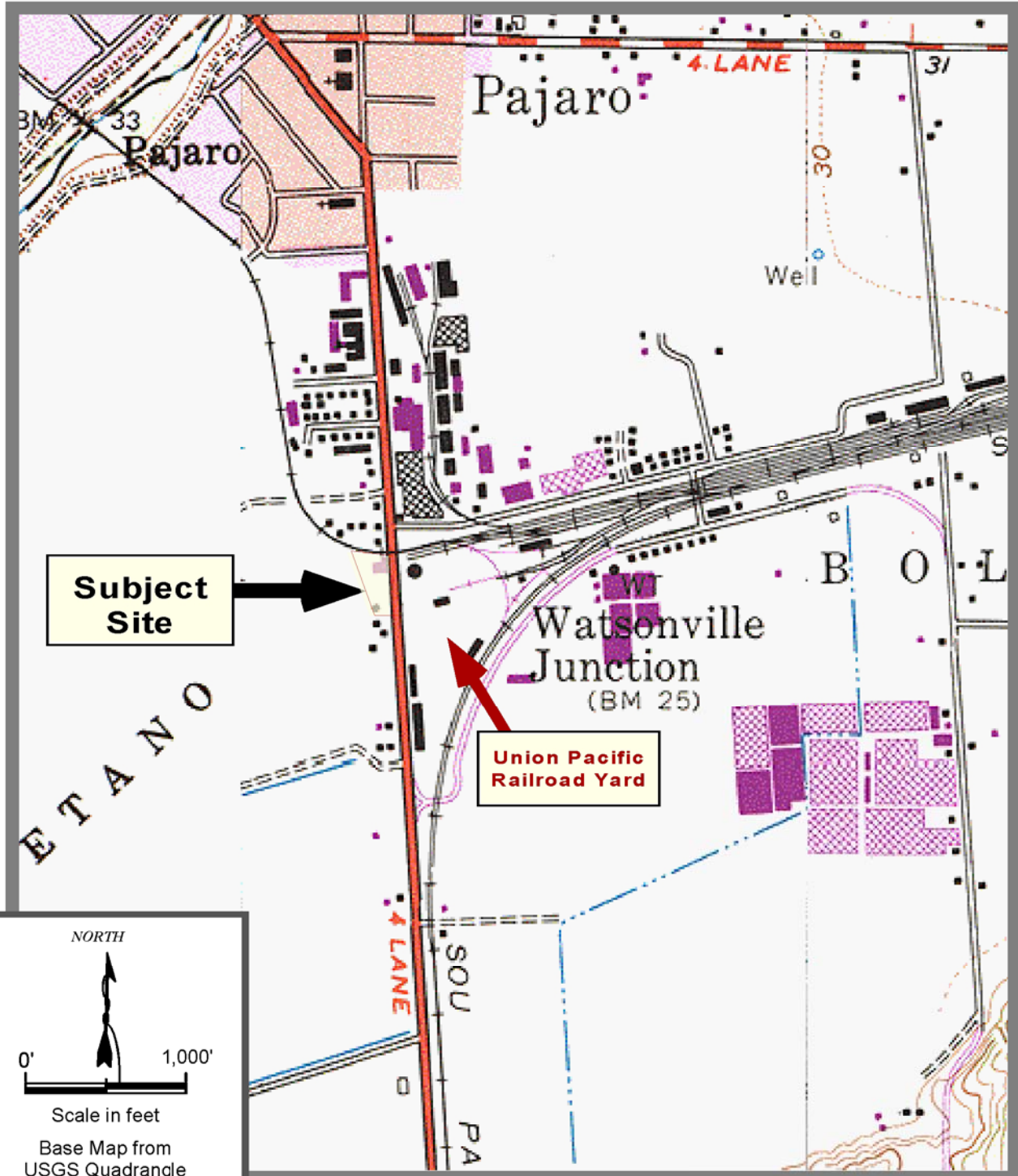
-- : Data missing, not available, or not collected.

** : Laboratory indicates result is possibly aged gasoline.

***: Confirmed by EPA Method 8260

Δ: McGregor Landsurveys noted an initial reporting error in the top of casing elevation reported for well MW-1. The top of casing elevation for well MW-1 was initially reported to be 25.47 feet, NAVD; the corrected elevation is 25.24 feet, NAVD.

FIGURES



22029.C&N\QM\QM2005\4q05\1-locat.cnv



Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100

Location Map
C&N Tractors
496-498 Salinas Road
Watsonville, California

FIGURE
1
Job #
22029

Explanation

MW-4
Elevation: 258.55'
TPH-g: 76,000 ppb
B: 23,000 ppb
T: 1,600 ppb
E: 1,600 ppb
X: 1,100 ppb
MTBE: < 3 ppb
D.O.: 0.05 ppm



Groundwater Monitoring Well (MW) location, designation, groundwater elevation, and analytical results

Analytical Results are in ug/L, parts per billion (ppb)

Samples Analyzed for:

Total Petroleum Hydrocarbons as Gasoline (TPH-g),
Benzene (B),
Toluene (T),
Ethylbenzene (E),
Xylenes (X),
Methyl Tert Butyl Ether (MTBE)

Dissolved Oxygen (D.O.) was measured in the field and is presented in mg/L, parts per million (ppm)

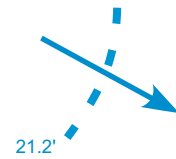
* = Laboratory indicates results possibly aged gasoline.

< X = Analyte not detected above laboratory detection limit, X

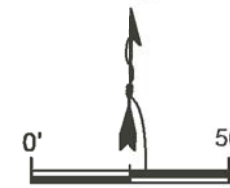
Groundwater elevation contours, and flow direction.

Groundwater gradient measured on October 19, 2005 was 0.001 ft/ft to the southwest.

Notes: Monitoring well MW-1 was installed in 1987. Monitoring wells MW-2, 3, & 4 were installed on January 25, 2005. Well elevations were professionally surveyed by McGregor Land Surveys on February 16, 2005, License # 5946.



NORTH



Approximate Scale in feet
Base Map from
Aerial Photo

Active Fuel Leak Site
(former railroad yard)
8 Groundwater Monitoring Wells

MW-1

Elevation: 17.30'
TPH-g: 60 ppb
B: ND
T: ND
E: ND
X: ND
MTBE: ND
D.O.: 0.14 ppm

MW-3

Elevation: 17.20'
TPH-g: ND
B: ND
T: ND
E: ND
X: ND
MTBE: ND
D.O.: 0.16 ppm

MW-2

Elevation: 17.31'
TPH-g: ND
B: ND
T: ND
E: ND
X: ND
MTBE: ND
D.O.: 0.12 ppm

MW-4

Elevation: 17.15'
TPH-g: ND
B: ND
T: ND
E: ND
X: ND
MTBE: 11 ppb
D.O.: 0.12 ppm

Tractor Sales
& Office

Asphalt Lot
Open Air Tractor Storage

Repair
Shop

Former Underground Gas Tank
(550-gallon, Removed: April 1987)

Paint
Shop

Parts &
Storage

Fabrication
Shop

Access Roads

Salinas Road

Railroad Tracks

Property Line

Agricultural
Fields

FIGURE
2
Job #
22029

Groundwater Monitoring Results
October 19, 2005
C&N Tractors
496-498 Salinas Road
Watsonville, California

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100



APPENDIX A

Standard Operating Procedure - Monitoring Well Sampling & Field Data Sheets

Appendix A

Standard Operating Procedure - Monitoring Well Sampling

Weber, Hayes and Associates' groundwater monitoring field methodology is based on procedures specified in the *LUFT Field Manual*. The first step in groundwater well sampling is for Weber, Hayes and Associates field personnel to measure the depth-to-groundwater to the nearest hundredth (0.01) of a foot with an electric sounder. If the well appears to be pressurized, or the groundwater level is fluctuating, measurements are made until the groundwater level stabilizes, and a final depth-to groundwater measurement is taken and recorded. After the depth-to-groundwater is measured, the well is then checked for the presence of free product with a clear, disposable polyethylene bailer. If free product is present, the thickness of the layer is recorded, and the product is bailed to a sheen. All field data (depth-to-groundwater, well purge volume, physical parameters, and sampling method) are recorded on field data sheets (see attached). Because removing free product may skew the data, wells that contain free product are not used in groundwater elevation and gradient calculations.

After measuring the depth-to-groundwater, each well, starting with the cleanest well (based on analytical results from the last sampling event), is purged with a low flow submersible electric pump. During purging the physical parameters of temperature, conductivity, pH, dissolved oxygen (D.O.) concentration, and Oxidation-Reduction Potential (ORP) of the purge water are monitored with a QED MP20 Micropurge Flow Through Cell equipped meter to insure that these parameters have stabilized (are within ~ 15 percent of the previous measurement). The QED MP20 meter is capable of continuously monitoring the physical parameters of the purge water via the flow through cell and providing an alarm to indicate when the physical parameters have stabilized to the users specifications. Purging is determined to be complete (stabilized aquifer conditions reached) after the removal of approximately three to five well volumes of water or when the physical parameters have stabilized. Dissolved oxygen and ORP measurements are used as an indicator of intrinsic bioremediation within the contaminant plume. All field instruments are calibrated before use.

All purge water is stored on site in DOT-approved, 55-gallon drums for disposal by a state-licensed contractor pending laboratory analysis for fuel hydrocarbons.

After purging, the water level in the well is allowed to recover to 80 percent of its original depth before a sample is collected. After water level recovery, a groundwater sample is collected from each well with a new, disposable bailer, and decanted into the appropriate laboratory-supplied sample container(s). The sample containers at this site were 40-ml. vials. Each vial was filled until a convex meniscus formed above the vial rim, then sealed with a Teflon[®]-septum cap, and inverted to insure that there were no air bubbles or head space in the vial. All samples are labeled in the field and transported in insulated containers cooled with blue ice to state-certified laboratories under proper chain of custody procedures.

All field and sampling equipment is decontaminated before, between, and after measurements or sampling by washing in a Liqui-Nox and tap water solution, rinsing with tap water, and rinsing with distilled water.

**Weber, Hayes & Associates**

Hydrogeology and Environmental Engineering

120 Westgate Dr. Watsonville, CA 95076

831-722-3600 Fax: 831-722-3100

EPA 801-722-1196

Indicate ATTACHMENTS THAT APPLY

75
☐ Site Map
☐ Data Sheets
☐ Geologic Logs
☐ Photo Sheets
☐ GPC's
☐ Chargeable Expenses

Client: C & N Tractors	Date: October 18, 2005
Site Location: 496 Salinas Road, Watsonville, CA	Study #: 22029.Q
Field Tasks: <input type="checkbox"/> Drilling <input checked="" type="checkbox"/> Sampling <input checked="" type="checkbox"/> Other (see below). 4th Quarter 2005 Groundwater Monitoring	Weather Conditions: Patchy High Fog, Cool
Personnel / Company On-Site: Jared Chaney (Weber, Hayes and Associates: WHA)	

FIELD WORK PLANNING:Performed on: **October 18, 2005**

Meet with Project Manager: ☒ Yes ☐ No
 Number of Wells to be Sampled: **4 wells with Dissolved Oxygen (D.O.) & Depth to Groundwater**
 Sample Wells: **MW-1 through 4**
 Analyze for: **TPH-g, BTEX, & MIBEs by EPA Method 8260 - GC/MS**
 Proposed Sampling Date: **October 18, 2005**

ON-SITE FIELD WORK:Arrive on-site at **0730** to conduct **4th Quarter 2005** Quarterly Groundwater Monitoring Well Sampling.**LABORATORY:**JC Send all analytical to: **Entech Analytical Laboratory, 408.588.0200 - 3334 Victor Court, Santa Clara, CA****GROUNDWATER MONITORING FIELD WORK STANDARD OPERATING PROCEDURES:**

(Initial)

- JC
- All sampling is conducted according to Standard Operating Procedure (SOP): 104
 - All pertinent information regarding the well, including water quality physical parameters are recorded on the following pages.
 - All samples are placed in a refrigerated cooler immediately after sampling.
 - All groundwater monitoring/purging/sampling equipment is decontaminated according to SOP 10B/at the beginning of on-site work, in between each well, and at the end of work.
 - All purge water is properly containerized in 55-gallon drums, or another suitable container, for later removal by a licensed subcontractor.
 - All samples are recorded on field Chain-of-Custody sheets for documentation of proper transportation to the appropriate Laboratory.

INSTRUMENT CALIBRATION:

QED MP20 Flow Through Cell: Temperature = **15.6°C** pH = **7.00 ± 0.00** Electrical Conductivity = **78.56** Barometric Pressure = **760 mmHg**
 D.O. % Saturation = **40%** Oxidation Reduction Potential (ORP) = **243 mV**

BEGIN SAMPLING WELLS:**MW-3, MW-2, MW-4, MW-1****COMMENTS:**

All wells will be purged until the QED MP20 unit indicates that the physical parameters of the water (pH, Conductivity, Temp, D.O., and ORP) have stabilized to within ± 15%, or once four casing volumes in the well column requiring sampling have been removed (see Groundwater Monitoring Well Sampling Field Data Sheet(s) for details). Wells will be purged from the bottom up and all WHA SOPs. Wells will only be sampling using a Bladder Pump or a disposable bailer, as per RWQCB guidelines.

Jared Chaney 10/19/05
 Signature of Field Personnel & Date



Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Fremont Cr., Alhambra, CA 91801
Tel: (626) 222-3686 Fax: (626) 222-3160
Fax: (626) 222-1115

Location	Groundwater Depth	Total Depth of Well	D.O. (mg/L)	ORP (mV)	Floating Product (comments)
MW-1	7.94'	14'	0.14	15	No FP; Slight Odor
MW-2	8.01'	20'	0.12	105	No FP; No Odor
MW-3	8.19'	19'	0.16	137	No FP; No Odor
MW-4	9.23'	20'	0.12	132	No FP; No Odor
<div>SC 10/19/05</div>					

HOW MANY PURGE DRUMS WERE LEFT ON-SITE: 1

CALL PURGE WATER REMOVAL SUBCONTRACTOR ON: 10/19/05

DRUMS WILL BE PURGED ON: 10/19/05

APPROXIMATE VOLUME (gallons): 50

COMMENTS:

[Signature] 10/19/05
Signature of Field Personnel & Date

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: C & N Tractors / 22029.Q Date: October 19, 2005

Sample No.: MW-3 Sample Location: MW-3

Samplers Name: Jered Chaney Recorded by: JC

Purge Equipment: Bailer: Disposable or Acrylic
 * Whaler # 1
 Bladder Pump
 Monsoon Deep Well Pump

Sample Equipment: * Disposable Bailer
 Whaler #
 Bladder Pump
 Submersible Pump

Analyses Requested (circle all that apply):
 TPH-gas, BTEX, MIBB, TBA, 1,2-DCA, EDB, 6200 Fuel Oxygenates, Methanol, Ethanol
 TPH-diesel, TPH-Motor Oil, TPH-Heating Oil
 Intrinsic Bio-Parameters

Well Number: MW-3 Well Diameter: 2" with Casing Volume of:
 Depth to Water: 8.19' TOC 2" = (0.16 Gallon/Feet)
 Well Depth: 19' BGS or TOC 4" = (0.65 Gallon/Feet)
 Height W-Column: 10.81' feet (well depth - depth to water) 5" = (1.02 Gallon/Feet)
 Volume in Well: 1.72 gallons (casing volume X height) 6" = (1.47 Gallon/Feet)
 Gallons to purge: 6.9 gallons (volume X 4) 8" = (2.61 Gallon/Feet)

Lab: Entech Analytical Transportation: Courier

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Microprobe Parameters Stabilized
0853	0	16.43	0.856	2.99	7.04	146	High: Brown, Many Fines	
0854	1	19.34	0.937	0.59	7.29	143	Moderate: Brown, Mod. Fines	
0855	2	18.85	0.968	0.25	7.36	141	↓ ↓ ↓	
0855	3	18.82	0.964	0.43	7.56	140		
0856	4	18.79	0.962	0.20	7.34	140	Low: Clear-brown, No Fines	
0857	5	18.77	0.963	0.17	7.34	139	↓ ↓ ↓	
0858	6	18.78	0.963	0.16	7.33	138		
0859	7	18.75	0.962	0.16	7.31	137	↓ ↓ ↓	
Stop	Purge Complete							

Wait for 80% well volume recovery prior to sampling.
 Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of original well volume:
 Original Height of Water Column = 10.81' x 0.8 = 8.64' - (Well Depth) 19' = Depth to water 10.35'

Time: 0850 1st measured depth to water, 8.57' feet below TOC.
 Time: 10 1st measured depth to water, 10 feet below TOC.
 Time: 10 1st measured depth to water, 10 feet below TOC.

Is well within 80% of original well casing volume: Yes ☒ No ☐
 Is well within 80% of original well casing volume: Yes ☐ No ☒
 Is well within 80% of original well casing volume: Yes ☐ No ☒

Sample Well

Time: 0850 Sample ID: MW-3 Depth: 8.57' feet below TOC

Comments: No Floating Product; No Odor

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.:	C & N Tractors / 22029.Q	Date:	October 19, 2005
Sample No.:	MU-2	Sample Location:	MU-2
Samplers Name:	Jered Chaney	Recorded by:	JC
Purge Equipment:		Sample Equipment:	
<input type="checkbox"/> Bailer: Disposable or Acrylic		<input checked="" type="checkbox"/> Disposable Bailer	
<input checked="" type="checkbox"/> Whaler # 1		<input type="checkbox"/> Whaler #	
<input type="checkbox"/> Bladder Pump		<input type="checkbox"/> Bladder Pump	
<input type="checkbox"/> Monsoon Deep Well Pump		<input type="checkbox"/> Submersible Pump	
Analyses Requested (circle all that apply):		Number and Types of Bottle Used:	
<input checked="" type="checkbox"/> PH-gas, BTEX, MIBB, TBA, 1,2-DGA, EDB, 8200 Porph Oxygenates, Methanol, Ethanol		3 x 40 mL VOA's	
<input type="checkbox"/> TPH-diesel, TPH-Motor Oil, TPH-Heating Oil			
<input type="checkbox"/> Intrinsic Bio-Parameters			

Well Number:	MU-2	Well Diameter:	2" with Casing Volume of:
Depth to Water:	8.61' TOC		2" = (0.16 Gallon/Feet)
Well Depth:	26' BGS or TOC		4" = (0.65 Gallon/Feet)
Height W-Column:	11.99' feet (well depth - depth to water)		5" = (1.02 Gallon/Feet)
Volume in Well:	1.91 gallons (casing volume X height)		6" = (1.47 Gallon/Feet)
Gallons to purge:	2.6 gallons (volume X 4)		8" = (2.61 Gallon/Feet)
Lab:	Entech Analytical	Transportation:	Courier

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micro-purge Parameters Stabilized
0905	0	17.61	1.082	0.29	6.88	150	High: Brown, Many Fines	
0906	1	19.56	1.243	0.93	7.04	140	Low: Clear, Many Fines	
0906	2	19.66	1.242	0.78	7.05	132		
0907	3	19.88	1.255	0.20	7.14	126		
0908	4	19.54	1.241	0.12	7.15	121		
0909	6	19.43	1.241	0.14	7.20	111		
0909	7	19.49	1.241	0.13	7.18	106		
0910	8	19.42	1.246	0.12	7.17	105		
Stop: Purge Complete								

Wait for 80% well volume recovery prior to sampling.
Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of original well volume:
Original Height of Water Column = $11.99' \times 0.8 = 9.59'$ - (Well Depth) $26' =$ Depth to water $16.41'$

Time: 0911	1st measured depth to water, 9.31' feet below TOC.	Is well within 80% of original well casing volume: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Time: 0912	1st measured depth to water, 9.35' feet below TOC.	Is well within 80% of original well casing volume: Yes <input type="checkbox"/> No <input type="checkbox"/>
Time: 0913	1st measured depth to water, 9.35' feet below TOC.	Is well within 80% of original well casing volume: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Sample Well

Time: 0911	Sample ID: MU-2	Depth: 9.31' feet below TOC
Comments: No Flooding product; No Odor		

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: <u>C & N Tractors / 22029.Q</u>	Date: <u>October 19, 2005</u>
Sample No.: <u>ML-4</u>	Sample Location: <u>ML-4</u>
Samplers Name: <u>Jared Chaney</u>	Recorded by: <u>JC</u>
Purge Equipment:	Sample Equipment:
Bailer: Disposable or Acrylic	<input checked="" type="checkbox"/> Disposable Bailer
Whaler # <u>1</u>	Whaler # _____
Bladder Pump	Bladder Pump
Monsoon Deep Well Pump	Submersible Pump
Analyses Requested (circle all that apply):	Number and Types of Bottle Used:
(TPH-gas, BTEX, MIBB, TBA, 1,2-DCA, EDB, 8280 Fuel Oxygenates, Methanol, Ethanol, TPH-diesel, TPH-Motor-Oil, TPH-Heating-Oil)	<u>3 x 40 mL VOA's</u>
Intrinsic Bio-Parameters: _____	

Well Number: <u>ML-4</u>	Well Diameter: <u>2"</u> with Casing Volume of:
Depth to Water: <u>9.25'</u> TOC	<u>2" = (0.16 Gallon/Feet)</u>
Well Depth: <u>20'</u> BGS or TOC	<u>4" = (0.65 Gallon/Feet)</u>
Height W-Column: <u>10.75'</u> feet (well depth - depth to water)	<u>5" = (1.02 Gallon/Feet)</u>
Volume in Well: <u>1.32</u> gallons (casing volume X height)	<u>6" = (1.47 Gallon/Feet)</u>
Gallons to purge: <u>6.38</u> gallons (volume X 4)	<u>8" = (2.61 Gallon/Feet)</u>
Lab: <u>Entech Analytical</u>	Transportation: <u>Courier</u>

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micro-purge Parameters Stabilized
0934	0	12.46	0.825	8.5	7.13	128	High - Brown, Many Fines	
0935	1	16.34	1.064	8.51	7.14	132	↓ ↓ ↓	
0936	2	16.39	1.057	8.22	7.13	134	↓ ↓ ↓	
0936	3	16.37	1.052	8.19	7.15	135	↓ ↓ ↓	
0937	4	16.36	1.053	8.12	7.16	131	Medium: Brown, Med. Fines	
0938	6	16.35	1.046	8.14	7.24	132	↓ ↓ ↓	
0939	7	16.34	1.046	8.12	7.24	133	↓ ↓ ↓	
Stop: Purge Complete								
30 min / 105								

Wait for 80% well volume recovery prior to sampling.
Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of original well volume:
Original Height of Water Column = $10.75' \times 0.8 = 8.60'$ - (Well Depth) 20' = Depth to water 11.40'

Time: <u>0940</u> 1st measured depth to water, <u>10.72'</u> feet below TOC.	Is well within 80% of original well casing volume: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Time: <u>10</u> 1st measured depth to water, <u>10</u> feet below TOC.	Is well within 80% of original well casing volume: Yes <input type="checkbox"/> No <input type="checkbox"/>
Time: <u>10</u> 1st measured depth to water, <u>10</u> feet below TOC.	Is well within 80% of original well casing volume: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Sample Well

Time: <u>0940</u>	Sample ID: <u>ML-4</u>	Depth: <u>10.72'</u> feet below TOC
Comments: <u>No Floating Product; No Odor.</u>		

GROUNDWATER MONITORING WELL SAMPLING FIELD DATA SHEET

Project Name/No.: C & N Tractors / 22029.Q **Date:** October 19, 2005
Sample No.: MW-1 **Sample Location:** MW-1
Samplers Name: Jared Chaney **Recorded by:** JC
Purge Equipment: Bailer: Disposable or Acrylic **Sample Equipment:**
Whaler # 1 Disposable Bailer
Bladder Pump Whaler #
Monsoon Deep Well Pump Bladder Pump
 Submersible Pump
Analyses Requested (circle all that apply): **Number and Types of Bottle Used:**
TPH-gas, BTEX, MIB, TBA, 1,2-DCA, EDB, B200 Fuel Oxygenates, Methanol, Ethanol 3 x 40 mL VOA's
TPH-diesel, TPH-Motor Oil, TPH-Heating Oil
Intake Bio. Parameters

Well Number: MW-1 **Well Diameter:** 2" with Casing Volume of:
Depth to Water: 7.44' TOC 2" = (0.16 Gallon/Feet)
Well Depth: 14' BGS or TOC 4" = (0.65 Gallon/Feet)
Height W-Column: 6.06' feet (well depth - depth to water) 5" = (1.02 Gallon/Feet)
Volume in Well: 0.96 gallons (casing volume X height) 6" = (1.47 Gallon/Feet)
Gallons to purge: 3.8 gallons (volume X 4) 8" = (2.61 Gallon/Feet)
Lab: Entech Analytical **Transportation:** Courier

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Microbials Parameters Stabilized
1002	0	19.01	1.211	0.49	6.92	103	<u>Black, Black, Many Fines</u>	
1003	1	19.06	1.313	0.39	6.98	61	<u>Low, Clear, Many Fines</u>	
1004	2	19.07	1.415	0.23	6.99	33		
1005	3	19.99	1.328	0.17	7.01	24		
1005	4	19.98	1.337	0.15	7.08	18		
1006	5	19.89	1.233	0.14	7.06	15		
Stop: Purge Complete.								
<u>1007</u>								
<u>1008</u>								

Wait for 80% well volume recovery prior to sampling.
Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of original well volume:
 Original Height of Water Column = 6.06' x 0.8 = 4.85' (Well Depth) 14' = Depth to water 9.15'

Time: 1007 1st measured depth to water, 6.16' feet below TOC. Is well within 80% of original well casing volume: Yes ☒ No ☐
 Time: 1008 1st measured depth to water, 13' feet below TOC. Is well within 80% of original well casing volume: Yes ☐ No ☒
 Time: 1st measured depth to water, feet below TOC. Is well within 80% of original well casing volume: Yes ☐ No ☐

Sample Well

Time: 1007 Sample ID: MW-1 Depth: 6.16' feet below TOC

Comments: No floating product; No Odor
EEJC

APPENDIX B

Certificates of Analysis and Chain-of-Custody Documentation - Groundwater Samples

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Jered Chaney
Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076

Certificate Number: 45854

Issued: 10/24/2005

Project Number: 22029.Q
Project Name: C&N Tractors

Order / Lab Number: 45854

Global ID: T0605300360

Certificate of Analysis - Final Report

On October 19, 2005, samples were received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

<u>Matrix</u>	<u>Test</u>	<u>Comments</u>
Liquid	EDF EPA 8260B EPA 624 TPH as Gasoline - GC-MS	

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,



Erin Cunniffe
Laboratory Operations Manager

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Jered Chaney

Date Received: 10/19/2005 2:13:47 PM

Project Number: 22029.Q
Project Name: C&N Tractors
GlobalID: T0605300360

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab #: 45854-001 Sample ID: MW-1

Matrix: Liquid Sample Date: 10/19/2005 10:07 AM

EPA 5030C EPA 8260B EPA 624										8260Petroleum
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	90.6		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	90.9		70 - 130							
Toluene-d8	98.5		70 - 130							

EPA 5030C GC-MS										TPH as Gasoline - GC-MS
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
TPH as Gasoline	65		1.0	25	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	99.3		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	101		70 - 130							
Toluene-d8	102		70 - 130							

Lab #: 45854-002 Sample ID: MW-2

Matrix: Liquid Sample Date: 10/19/2005 9:11 AM

EPA 5030C EPA 8260B EPA 624										8260Petroleum
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	92.0		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	91.7		70 - 130							
Toluene-d8	98.7		70 - 130							

EPA 5030C GC-MS										TPH as Gasoline - GC-MS
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
TPH as Gasoline	ND		1.0	25	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	101		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	102		70 - 130							
Toluene-d8	102		70 - 130							

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

10/24/2005 4:51:28 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Jered Chaney

Date Received: 10/19/2005 2:13:47 PM

Project Number: 22029.Q
Project Name: C&N Tractors
GlobalID: T0605300360

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab #: 45854-003 Sample ID: MW-3

Matrix: Liquid Sample Date: 10/19/2005 8:40 AM

EPA 5030C EPA 8260B EPA 624			8260Petroleum							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Methyl-t-butyl Ether	ND		1.0	1.0	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	91.5		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	92.4		70 - 130							
Toluene-d8	97.6		70 - 130							

EPA 5030C GC-MS			TPH as Gasoline - GC-MS							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
TPH as Gasoline	ND		1.0	25	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	100		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	102		70 - 130							
Toluene-d8	100		70 - 130							

Lab #: 45854-004 Sample ID: MW-4

Matrix: Liquid Sample Date: 10/19/2005 9:40 AM

EPA 5030C EPA 8260B EPA 624			8260Petroleum							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Toluene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Ethyl Benzene	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Xylenes, Total	ND		1.0	0.50	µg/L	N/A	N/A	10/20/2005	WM2051020	
Methyl-t-butyl Ether	11		1.0	1.0	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	91.8		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	90.9		70 - 130							
Toluene-d8	98.1		70 - 130							

EPA 5030C GC-MS			TPH as Gasoline - GC-MS							
Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch	
TPH as Gasoline	ND		1.0	25	µg/L	N/A	N/A	10/20/2005	WM2051020	
Surrogate	Surrogate Recovery		Control Limits (%)						Analyzed by: TAF	
4-Bromofluorobenzene	101		70 - 130						Reviewed by: MaiChiTu	
Dibromofluoromethane	101		70 - 130							
Toluene-d8	101		70 - 130							

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

10/24/2005 4:51:29 PM - ECunniffe

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2051020

Validated by: MaiChiTu - 10/24/05

QC Batch Analysis Date: 10/20/2005

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Methyl-t-butyl Ether	ND	1	1.0	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	90.3	70 - 130
Dibromofluoromethane	90.4	70 - 130
Toluene-d8	97.3	70 - 130

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2051020

Reviewed by: MaiChiTu - 10/24/05

QC Batch ID Analysis Date: 10/20/2005

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
1,1-Dichloroethene	<0.50	20	21.3	µg/L	107	70 - 130
Benzene	<0.50	20	19.3	µg/L	96.7	70 - 130
Chlorobenzene	<0.50	20	22.2	µg/L	111	70 - 130
Methyl-t-butyl Ether	<1.0	20	17.1	µg/L	85.7	70 - 130
Toluene	<0.50	20	19.5	µg/L	97.7	70 - 130
Trichloroethene	<0.50	20	22.2	µg/L	111	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	90.2	70 - 130
Dibromofluoromethane	92.4	70 - 130
Toluene-d8	95.5	70 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
1,1-Dichloroethene	<0.50	20	20.0	µg/L	100	6.4	25.0	70 - 130
Benzene	<0.50	20	18.5	µg/L	92.6	4.3	25.0	70 - 130
Chlorobenzene	<0.50	20	21.4	µg/L	107	3.8	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	16.4	µg/L	82.1	4.2	25.0	70 - 130
Toluene	<0.50	20	18.8	µg/L	93.8	4.1	25.0	70 - 130
Trichloroethene	<0.50	20	21.1	µg/L	106	5.0	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	90.5	70 - 130
Dibromofluoromethane	91.3	70 - 130
Toluene-d8	95.7	70 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2051020

Reviewed by: MaiChiTu - 10/24/05

QC Batch ID Analysis Date: 10/20/2005

MS Sample Spiked: 45824-002

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	5.63	20	25.0	µg/L	10/20/2005	96.6	70 - 130
Methyl-t-butyl Ether	1.14	20	19.0	µg/L	10/20/2005	89.3	70 - 130
Toluene	5.12	20	23.9	µg/L	10/20/2005	94.1	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	90.1	70 - 130
Dibromofluoromethane	97.6	70 - 130
Toluene-d8	94.4	70 - 130

MSD Sample Spiked: 45824-002

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	5.63	20	24.1	µg/L	10/20/2005	92.2	4.6	25.0	70 - 130
Methyl-t-butyl Ether	1.14	20	19.0	µg/L	10/20/2005	89.2	0.15	25.0	70 - 130
Toluene	5.12	20	23.6	µg/L	10/20/2005	92.6	1.6	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	89.7	70 - 130
Dibromofluoromethane	97.3	70 - 130
Toluene-d8	94.8	70 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2051020

Validated by: MaiChiTu - 10/24/05

QC Batch Analysis Date: 10/20/2005

Parameter	Result	DF	PQLR	Units
TPH as Gasoline	ND	1	25	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	99.1	70 - 130
Dibromofluoromethane	100	70 - 130
Toluene-d8	100	70 - 130

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2051020

Reviewed by: MaiChiTu - 10/24/05

QC Batch ID Analysis Date: 10/20/2005

LCS						
Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	250	270	µg/L	108	65 - 135
Surrogate	% Recovery	Control Limits				
4-Bromofluorobenzene	101	70 - 130				
Dibromofluoromethane	102	70 - 130				
Toluene-d8	100	70 - 130				

LCSD								
Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	250	272	µg/L	109	0.79	25.0	65 - 135
Surrogate	% Recovery	Control Limits						
4-Bromofluorobenzene	102	70 - 130						
Dibromofluoromethane	102	70 - 130						
Toluene-d8	101	70 - 130						



OF

Weber, Hayes and Associates

APPENDIX C

Former Waste Oil UST Closure Application, Site Map, and Certificate
of Analysis (BH-1) - Previously submitted in Weber, Hayes and
Associates *Phase I and II Environmental Site Assessment* dated April 14,
1997

WASTE OIL TANK
REMOVAL

Permit No. _____
Date _____
Fee \$100.00/1 tank, \$30.00 each additional

1180 Broadway
King City, CA
(408) 385-1291

Division of Environmental Health
Monterey County Health Department
1270 Natividad Road, Salinas, CA
(408) 757-1061

1200 Aguajito Road
Monterey, CA
(408) 373-0111

UNDERGROUND STORAGE TANK CLOSURE APPLICATION

ADDRESS OF PERMIT ACTIVITY: 496 Salinas Rd Watsonville, Calif. 95076
FACILITY NAME: C & N Tractors
FACILITY CONTACT PERSON: Jimmie A. Cox PHONE: 722-2733
APPLICANT'S NAME: C & N Tractors PHONE: 722-2733
MAILING ADDRESS: 496 Salinas Rd. Watsonville, Calif. 95076
CONTRACTOR: Ruelas Concrete PHONE: 722-9944
CONTRACTOR LICENSE CLASS: C-8 LICENSE NUMBER: 285183

TYPE OF CLOSURE:

Removal ☒ Abandonment in place _____ Temporary _____

Do you have reason to believe that the tank(s) or piping is currently, or ever was, leaking?

☐ Yes ☒ No If yes, please explain _____

Describe the tank(s) involved, including size, type (eg. steel, fiberglass, etc.), location (under a building, under other private property, under a street or sidewalk) and substance(s) currently or previously stored in the tanks(s):

500 Gal Steel tank Tank is on the west
fence line between main shop and wash rack.
There is a cement pad on top of it. It is
used to store waste oil.

PAID
13789
12-28-88

Final disposition of tank:

1. Reuse as an above ground storage tank

Location Pending
Hauler _____ Waste Hauler Number _____

2. Off site disposal

Location _____
Hauler _____ Waste Hauler number _____

3. Cleaned on site and removed to a metal Salvager

Tank Cleaning Company _____
Metal Salvager _____

Applicant's Signature _____ Date _____

ENVIRONMENTAL HEALTH DEPARTMENT USE ONLY

Date of Inspection: _____

Inspected by: _____

Tank vapor purged: _____



Railroad Tracks

aboveground diesel
and waste oil tanks

Approximate Shallow
Groundwater
Flow Direction

BH-1

GROUNDWATER @ 7' SOIL @ 10'
(PARTS PER BILLION) (PARTS PER MILLION)
MOTOR OIL: 80. MOTOR OIL: ND.
SOLVENTS: ND. SOLVENTS: ND.

Tractor Sales and Parts

Former Underground Waste Oil Tank
550-gallon, steel,
Removed: March 1989

steamcleaner slab

Repair
Building

Well MW1
water @ 7'
Gasoline: 7500ppb
benzene: 26 ppb

Former Underground Gas Tank
500-gallon, steel,
Removed: April 1987

Tractor Fabrication

SALINAS ROAD



1 inch = 75 feet

Base Map from Boundary Adjustment Map
(provided by sanson & Locke-Paddon, LLP)

g:\ajob\h7001\Site-C&N.cvs



Weber Hayes & Associates
Engineering Geology, and Hydrogeology
120 Westgate Drive, Watsonville, Ca. 95076
(408) 722 - 3580 (408) 662 - 3100

SITE MAP
C & N Tractors
496-498 Salinas Road
Watsonville, California

FIGURE
2
Job #
H7001

**TPH-EXTRACTABLE (OIL RANGE) BY GC/FID****Client Project/I.D.:** H7001 C&N TRACTORS**Date Sampled:** 03/11/97**Date Received:** 03/12/97**Date Extracted:** 03/13/97**Matrix:** Water**Analyst:** *AM*

Concentration in sample expressed as ug/L (ppb).

Sample ID	Oil	Lab I.D.	Surrogate Recovery	Date Analyzed	PQL (ppb)
BH-1 (Water)	80	4851-03	84%	03/18/97	50
Method Blank	ND	4851-MB	79%	03/18/97	50

PQL = Practical Quantitation Limit.

ND = None Detected at or above the PQL.

Surrogate acceptance control limits are 58-119%. Hexacosane (C26) is used as the surrogate compound.

NOTE: Sample BH-1 (Water) contains a light oil in the range C16-C27.

Total Extractable Petroleum Hydrocarbons are analyzed in accordance with the California State Water Resources Control Board Leaking Underground Fuel Tank (LUFT) Manual, Last Revision October 1989. Method 3510 is used for sample preparation.

**TPH-EXTRACTABLE (OIL RANGE) BY GC/FID**Client Project/I.D.: **H7001 C&N TRACTORS**Date Sampled: **03/11/97**Date Received: **03/12/97**Date Extracted: **03/17/97**Matrix: **Soil**Analyst: *pm*

Concentration in sample expressed as ug/g (ppm).

Sample ID	Oil	Lab I.D.	Surrogate Recovery	Date Analyzed	PQL
BH-1 @10'	ND	4851-02	82%	03/17/97	10
Method Blank	ND	4851-MB	88%	03/17/97	10

PQL = Practical Quantitation Limit.

ND = None Detected at or above the PQL.

Surrogate recovery control limits for hexacosane (C26) are 68-110%.

Total Extractable Petroleum Hydrocarbons is analyzed in accordance with the California State Water Resources Control Board Leaking Underground Fuel Tank (LUFT) Manual, Last Revision October 1989. Method 3550 is used for sample preparation.

APPENDIX D

Case Closure Summary Report

CASE CLOSURE SUMMARY

Leaking Underground Storage Tank Program

I. Agency Information

Agency Name: RWQCB - Central Coast Region	Address: 895 Aerovista Place, Suite 101
City/State/Zip: San Luis Obispo, CA 93401	Phone: (805) 542-4628
Responsible Staff person: John Goni	Title:

II. Case Information

Site Facility Name: C & N Tractors		LUSTIS Case #: 675
Site Facility Address: 496 Salinas Road, Watsonville, California		
Responsible Parties	Address	Phone Number
Ms. Judy Cox	21389 Boyle Road, Palo Cedro, California 96703	

III. Tank Information

Tank #	Size in Gallons	Contents	Closed in Place/Removed	Date
1	550-gallon	Unleaded Gasoline	Removed	April 30, 1987
2				
3				
4				
5				

IV. Release and Site Characterization Information

Cause and Type of Release: corrosion		
Site Characterization Complete? yes	Date Approved by Oversight Agency: May 22, 2003	
Monitoring Wells Installed? yes	Number: four	Proper Screened interval? yes
Highest GW Depth Below Ground Surface: 4.20 ft.	Lowest: > 14 ft.	Flow Direction: SE - SW
Most Sensitive Current GW Use: Unknown		
Are Drinking Water Wells Affected? No	Aquifer Name: shallow unconfined	
Is Surface Water Affected? No	Nearest affected SW name: None	
Off-site Beneficial Use Impacts (addresses/locations): None		

CASE CLOSURE SUMMARY

Leaking Underground Storage Tank Program

V. Treatment/Disposal Methods (Attach any additional information)

Material	Amount (Include Units)	Action (Treatment or Disposal Method)	Date
Tanks	550-gallons	Removed	April 30, 1987
Piping			
Free Product			
Soil			
Ground Water			

Maximum Documented Contaminant Concentrations--Before and After Cleanup

Contaminant	Soil (mg/kg) *		Water (mg/L)		Contaminant	Soil (mg/kg)		Water (mg/L)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	330	220	20,000	65	1,2-DCA	--	--	--	--
TPH (Diesel)	--	--	--	--	Oil & Grease	--	--	--	--
Benzene	0.1	ND	31	ND	Lead	--	--	--	--
Toluene	17	ND	35	ND	MTBE	ND	ND	8.2*	11*
Ethylbenzene	--	ND	330	ND	Other	--	--	--	--
Xylenes	130	ND	1,200	ND					

Comments: The "before" maximum soil contaminant concentrations presented above were obtained by the Don Chapin Co. from the UST excavation during tank closure operations on April 30, 1987. The "after" maximum soil contaminant concentrations presented above come from a small lens of impacted soil encountered during the installation of well MW-2 on January 25, 2005. The "before" maximum contaminant concentrations detected in groundwater are from WHA soil and groundwater assessment work conducted in June 2003. The "after" maximum contaminant concentrations detected in groundwater are from WHA most recent groundwater monitoring event on October 19, 2005. *MTBE in one well is not related to tank release.

VI. Closure

Does completed corrective action protect existing beneficial uses per the Basin Plan? yes
Does completed corrective action protect potential beneficial uses per the Basin Plan? yes
Does corrective action protect public health for current land use? yes
Site Management Requirements: none

CASE CLOSURE SUMMARY

Leaking Underground Storage Tank Program

Should corrective action be reviewed if land use changes? no		
Monitoring Wells Decommissioned? 0	Number Decommissioned: 0	Number Retained: 4

List Enforcement Actions Taken: none
List Enforcement Actions Rescinded: N/A

VII. Local Agency Representative Data

Agency: Monterey County Health Department – Division of Environmental Health	Address: 1270 Natividad Road, Room 301
City/State/Zip: Salinas, CA 93906	Phone: (831) 755-4723
Responsible Staff Person: Robert Fernandez	Title: Registered Environmental Health Specialist

VIII. Additional Comments

Three consecutive rounds of groundwater monitoring at the subject site confirm that contaminant concentrations remain
below regulatory Action Levels / Maximum Contaminant Levels, with the exception of the low level detection of MtBE
present in well MW-4, MTBE is not present in monitoring wells at and closer to the former tank). The low detection of MtBE
in MW-4 is believed to have originated from a minor surface spillage and is not considered a significant threat to
groundwater. The plume has naturally attenuated based on the lack of volatile compounds (BTEX) and the low level
detection of TPH-gas, which is common for old releases that have attenuated by biodegradation and/or soil vapor
volatilization.

CASE CLOSURE SUMMARY

Leaking Underground Storage Tank Program

IX. Regional Board Certification

Signature of Executive Officer	Date:
---------------------------------------	--------------

X. Additional Information (to be attached to this report)

1. Listing of Reports

Weber Hayes and Associates Reports for C & N Tractors 496-498 Salinas Road, Watsonville, California:

Phase I & II Environmental Site Assessment, April 14, 1997.

Workplan for Soil and Groundwater Characterization, April 11, 2003.

Summary Report: Shallow Soil and Groundwater Assessment Report, 2 .Workplan: Installation of a Shallow Groundwater Monitoring Network, October 3, 2003

Monitoring Well Installation, Development, and Sampling Report, March 9, 2005

Semi-Annual Groundwater Monitoring Report – Spring 2005, May 3, 2005

On or attached to the list must be the following statement, with the dated signature of the responsible party or his agent:

I attest, under penalty of perjury, in accordance with Water Code section 13267, the following documents constitute the complete list of documents pertaining to waste discharged, hydrogeology and other information directly relevant to the characterization and cleanup of the waste discharged at the subject site.

Signed  Date 11/1/05
Jered Chaney
Staff Geologist

2. Extent of Soil Contamination

ATTACHMENT A: Map showing the extent of soil degradation by chemicals of concern in excess of guidelines:

A-1: *Figure 3, Soil and Groundwater Analytical Results – July 17 & 19, 2003*

ATTACHMENT B: Geologic log of the most highly degraded soil boring:

B-1: *Geologic Log of Monitoring Well MW-2*

ATTACHMENT C: Soil sample analytical results:

C-1: *Table 3: Current Soil Sample Results, from WHA Shallow Soil and Groundwater Assessment Report dated October 3, 2003*

C-2: *Table 2: Summary of Soil Sample Analytical Data*

3. Extent of Groundwater Contamination

ATTACHMENT D: Maps showing the extent of groundwater degradation in excess of detection limits for chemicals of concern before and after remediation:

D-1: *Figure 3, Soil and Groundwater Analytical Results – July 17 & 19, 2003*

D-2: *Figure 2, Groundwater Monitoring Results – October 19, 2005*

ATTACHMENT E: Geologic logs, including construction, for all wells:

E-1: *Geologic Logs of Hydraulic Driven Geo-Probe Borings DP-1 through DP-6*

E-2: *Geologic Log of Monitoring Wells MW-2, 3, & 4.*

ATTACHMENT F: Groundwater sample analytical results:

F-1: *Table 3: Current Groundwater Sample Results, WHA Shallow Soil and Groundwater Assessment Report dated October 3, 2003*

F-2: *Table 1: Summary of Groundwater Elevation and Analytical Data*

ATTACHMENT A

**Maps showing the extent of soil degradation by chemicals of concern
in excess of guidelines:**

A-1: *Figure 3, Soil and Groundwater Analytical Results – July 17 & 19,
2003*

Explanation

Driven Probe Location (June 19, 2003)

DP-6:	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	ND	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

Lab Analysis

BTEX; benzene, toluene, ethylbenzene and xylenes.

- Soil results in parts per million (mg/kg)

- Water results in parts per billion (ug/L)

Existing Groundwater Well (MW-1)

NORTH



Approximate Scale in feet
Base Map from
Aerial Photo

Tractor Sales
& Office

Salinas Road

Agricultural
Fields

Asphalt Lot
Open Air Tractor Storage

DP-2:

	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	9.2	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

DP-6:

	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	ND	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

Approximate Shallow
Groundwater
Flow Direction

DP-1:

	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	3.4	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

Former Underground Gas Tank
(550-gallon, Removed: April 1987)

Monitoring Well (MW-1)

(total depth= 15'; groundwater @ 7')

	Jul-17-03	Dec-98	Mar-97	Dec-88	Feb-88
TPH-Gasoline:	ND	5,000.	7,500.	1,100.	840.
Benzene:	ND	13.	28.	6.5	31.
Toluene:	ND	16.	nd.	28.	35.
Ethylbenzene:	ND	100.	330.	12.	8.7
Xylenes:	ND	280.	1,200.	100.	47.
MTBE:	ND	nd.	—	—	—

June-July 1989: Well dry.
Mar-97 sample: Phase 1 ESA

DP-4:

	Soil		Groundwater
	@ 2'	@6'	@ 7'
TPH-Gasoline:	ND	2.9	14,000.
Benzene:	ND	ND	34.
Toluene:	ND	0.045	32.
Ethylbenzene:	ND	ND	ND
Xylenes:	ND	ND	ND
MTBE:	ND	ND	1.9

DP-3:

	Soil		Groundwater
	@ 2'	@6'	@ 7'
TPH-Gasoline:	7.2	14.	20,000.
Benzene:	ND	ND	41.
Toluene:	ND	ND	ND
Ethylbenzene:	ND	ND	350.
Xylenes:	ND	ND	ND
MTBE:	ND	ND	ND

DP-5:

	Soil		Groundwater
	@ 2'	@6'	@ 7'
TPH-Gasoline:	5.7	6.6	15,000.
Benzene:	ND	ND	36.
Toluene:	ND	ND	ND
Ethylbenzene:	ND	ND	25.
Xylenes:	0.21	ND	ND
MTBE:	ND	ND	17

file: 22029.c&n\Figures\4-soil&gw

FIGURE
3
Job #
22029.B

SOIL AND GROUNDWATER ANALYTICAL RESULTS

C&N Tractors
496-498 Salinas Road
Watsonville, California

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100



ATTACHMENT B

Geologic log of the most highly degraded soil boring:

B-1: Geologic Log of Monitoring Well MW-2



Geologic Symbols and Terms

Major Divisions		Symbols	Descriptions
Coarse Grained Soils	Gravels (More than 1/2 of coarse fraction > no. 4 sieve size)	GW	Well Graded Gravels, little or no fines
		GP	Poorly Graded Gravels, little or no fines
		GM	Silty Gravels, gravel-silt mixtures
		GC	Clayey Gravels, gravel-clay mixtures
	Sands (More than 1/2 of coarse fraction < no. 4 sieve size)	SW	Well Graded Sand, little to no fines
		SP	Poorly Graded Sand
		SM	Silty Sand, sand-silt mixtures
		SC	Clayey Sand, sand-clay mixtures
Fine Grained Soils	Silts and Clays Liquid Limit < 50%	ML	Silt or Very Fine Sands, rock flour, with slight plasticity
		CL	Inorganic Clay with high plasticity, lean clay
	Silts and Clays Liquid Limit > 50%	MH	Inorganic Sandy Clay or Silt, elastic silts
		CH	Inorganic Sandy Clay or Silt, with high plasticity, fat clays

Symbols and Terms

- First encountered groundwater

- Stabilized groundwater

- Sample interval

- Soil sample sent to laboratory for targeted analysis

- Water sample sent to laboratory for targeted analysis

Percentage Terms

Trace = < 5%
 Few = 5 - 10%
 Little = 15 - 20%
 Some = 30 - 45%
 Dominantly = > 50%

Acronyms

ags = above ground surface
 bgs = below ground surface
 ppmV = parts per million by volume
 PID = Photo-Ionization Detector
 USCS = Unified Soil Classification System

SOIL DENSITY/CONSISTENCY

Blow count is the number of blows required to drive a 2-inch diameter California Modified Split-Spoon Sampler the last 12 inches of an 18 inch sample interval by a 140-pound hammer free-falling 30 inches.

SANDS & GRAVELS	BLOWS/FT.	SILTS & CLAYS	BLOWS/FT.
VERY LOOSE	0 - 4	VERY SOFT	0 - 2
LOOSE	4 - 10	SOFT	2 - 4
MED. DENSE	10 - 30	FIRM	4 - 8
DENSE	30 - 50	STIFF	8 - 16
VERY DENSE	> 50	VERY STIFF	16 - 32
		HARD	> 32

Well Construction Symbols

- Cement Seal
 - Bentonite Seal
 - Filter Pack
 - Screened Interval



GEOLOGIC LOG

Monitoring Well

JOB NO.: 22029.C

DATE: January 25, 2005

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Pajaro, Monterey County

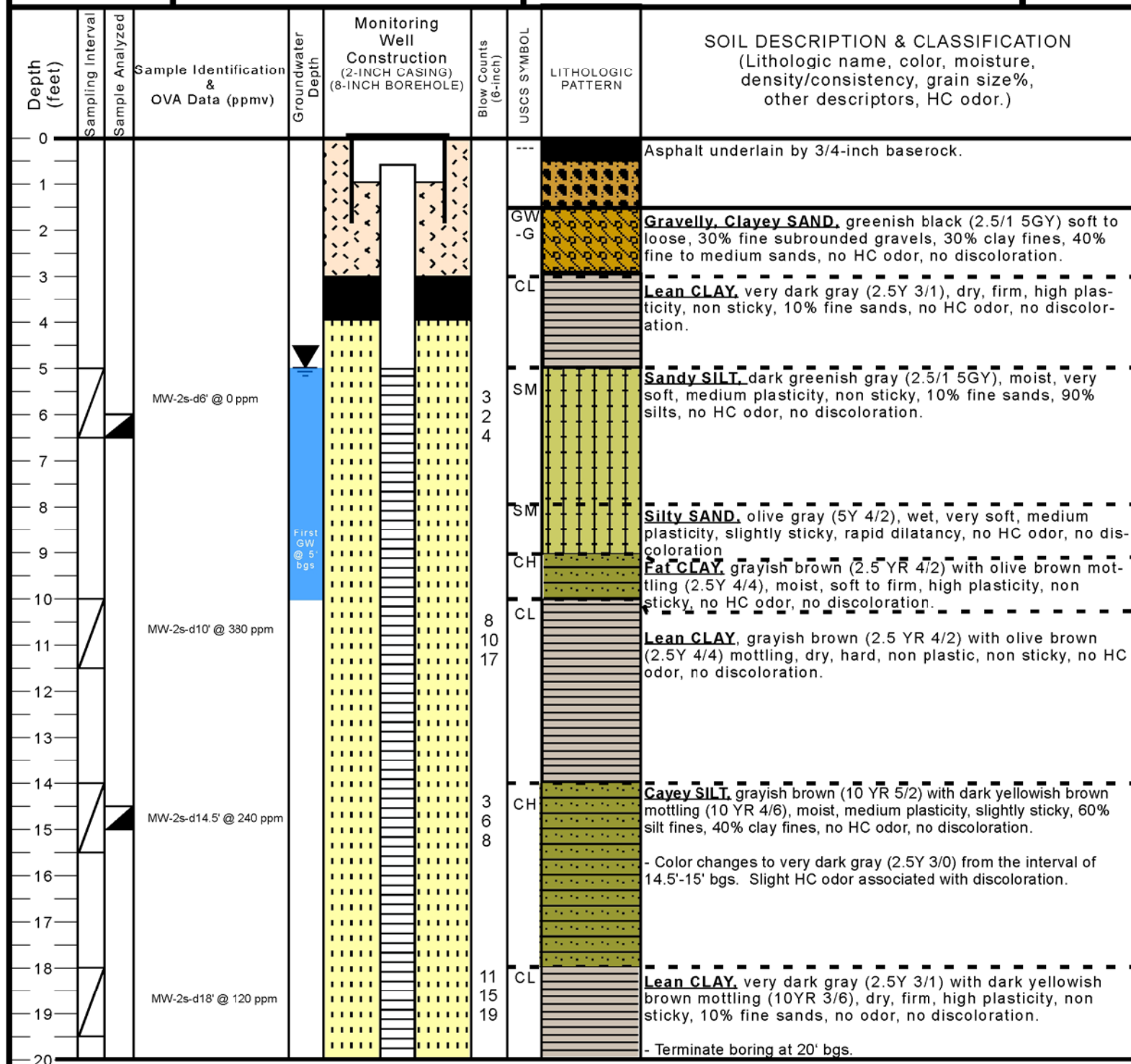
LOGGED & SAMPLED BY: J. Chaney

DRILLER: Exploration Geoservices (Lauren / Jason)

DRILL METHOD: Hollow Stem Auger

BORING #

MW-2

Sheet
1 of 1

- Lithology has been partially interpreted from previous driven probe borings conducted at this site.

-- Construct Monitoring Well as depicted above:

Blank Casing:	0 - 5' bgs
Screened Casing (0.010 slot):	5 - 20' bgs
Cement Seal (Portland):	0 - 3' bgs
Bentonite Seal (3/4-inch chips):	3 - 4' bgs
Sand Pack (#3 Sand):	4 - 20' bgs

ATTACHMENT C

Soil sample analytical results:

C-1: *Table 3: Current Soil Sample Results, from WHA
Shallow Soil and Groundwater Assessment Report dated October 3, 2003*

C-2: *Table 2: Summary of Soil Sample Analytical Data*

Soil Test Results: Two shallow soil samples from each boring were targeted for certified laboratory testing. Samples targeted for lab analysis were collected from a depth of 2 feet to check for surface contamination sources and from a depth of 6 feet which is just above the soil-groundwater interface. The 12 samples were tested for dissolved gasoline and constituent gas compounds (TPH-gas, BTEX, MTBE). The results are tabulated below.

Table 3
CURRENT SOIL SAMPLE RESULTS
(all results in parts per million, mg/kg).

Driven Probe ID #		Laboratory Analysis Results					
		Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
DP-1	@ 2'	3.4	ND	ND	ND	ND	ND
	@ 6'	ND	ND	ND	ND	ND	ND
DP-2	@ 2'	9.2	ND	ND	ND	ND	ND
	@ 6'	ND	ND	ND	ND	ND	ND
DP-3	@ 2'	7.2	ND	ND	ND	ND	ND
	@ 6'	14	ND	ND	ND	ND	ND
DP-4	@ 2'	ND	ND	ND	ND	ND	ND
	@ 6'	2.9	ND	0.045	ND	ND	ND
DP-5	@ 2'	5.7	ND	ND	0.21	ND	ND
	@ 6'	6.6	ND	ND	ND	ND	ND
DP-6	@ 2'	ND	ND	ND	ND	ND	ND
	@ 6'	ND	ND	ND	ND	ND	ND
Laboratory PQL:		2.5	0.025			0.05	0.25

ND: Not detected.

(1): MTBE confirmed by EPA Method #8269.

< X: Diluted Sample, increased detection limit "X"

Table 2
Summary of Soil Sample Analytical Data
C & N Tractors - 496 - 498 Salinas Road, Watsonville, California
All soil results in parts per million (mg/kg or mg/L)

Well I.D.	Sample Identification	Sample Depth (bgs, ft)	Date Sampled	Total Petroleum Hydrocarbons as Gasoline	Volatile Organic Compounds				
					Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-2	MW-2S-d6	6	1/25/2005	ND	ND	ND	ND	ND	ND
	MW-2S-d14.5	14.5	1/25/2005	**220	ND	ND	ND	ND	ND
MW-3	MW-3S-d6	6	1/25/2005	ND	ND	ND	ND	ND	ND
MW-4	MW-4S-d6	6	1/25/2005	ND	ND	ND	ND	ND	ND
Laboratory's Practical Quantitation Limits (PQL's):				50	5	5	5	10	5
Monterey County Health Department (MCHD) Soil Action Levels (AL's):				100	0.1	0.1	1	1	0.05

NOTES:

- ** = Laboratory indicates TPH gas reported value possibly aged gasoline.
 < # = Detection limit elevated due to sample dilution and compound not detected at or above detection limit reported.
 ND = Not detected at or above the lab's practical quantitation limit.
 MTBE = Methyl-tert-Butyl Ether

ATTACHMENT D

Maps showing the extent of groundwater degradation in excess of detection limits for chemicals of concern before and after remediation:

D-1: *Figure 3, Soil and Groundwater Analytical Results – July 17 & 19, 2003*

D-2: *Figure 2, Groundwater Monitoring Results – October 19, 2005*

Explanation

Driven Probe Location (June 19, 2003)

DP-6:	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	ND	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

Lab Analysis

BTEX; benzene, toluene, ethylbenzene and xylenes.

- Soil results in parts per million (mg/kg)

- Water results in parts per billion (ug/L)

Existing Groundwater Well (MW-1)

NORTH



Approximate Scale in feet
Base Map from
Aerial Photo

Tractor Sales
& Office

Salinas Road

Agricultural
Fields

Asphalt Lot
Open Air Tractor Storage

Approximate Shallow
Groundwater
Flow Direction

DP-2:

	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	9.2	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

DP-6:

	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	ND	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

DP-1:

	Soil		Groundwater
	@2'	@6'	@7'
TPH-Gasoline:	3.4	ND	ND
BTEX:	ND	ND	ND
MTBE:	ND	ND	ND

Former Underground Gas Tank
(550-gallon, Removed: April 1987)

Monitoring Well (MW-1)

(total depth= 15'; groundwater @ 7')

	Jul-17-03	Dec-98	Mar-97	Dec-88	Feb-88
TPH-Gasoline:	ND	5,000.	7,500.	1,100.	840.
Benzene:	ND	13.	28.	6.5	31.
Toluene:	ND	16.	nd.	28.	35.
Ethylbenzene:	ND	100.	330.	12.	8.7
Xylenes:	ND	280.	1,200.	100.	47.
MTBE:	ND	nd.	—	—	—

June-July 1989: Well dry.
Mar-97 sample: Phase 1 ESA

DP-4:

	Soil		Groundwater
	@ 2'	@6'	@ 7'
TPH-Gasoline:	ND	2.9	14,000.
Benzene:	ND	ND	34.
Toluene:	ND	0.045	32.
Ethylbenzene:	ND	ND	ND
Xylenes:	ND	ND	ND
MTBE:	ND	ND	1.9

DP-3:

	Soil		Groundwater
	@ 2'	@6'	@ 7'
TPH-Gasoline:	7.2	14.	20,000.
Benzene:	ND	ND	41.
Toluene:	ND	ND	ND
Ethylbenzene:	ND	ND	350.
Xylenes:	ND	ND	ND
MTBE:	ND	ND	ND

DP-5:

	Soil		Groundwater
	@ 2'	@6'	@ 7'
TPH-Gasoline:	5.7	6.6	15,000.
Benzene:	ND	ND	36.
Toluene:	ND	ND	ND
Ethylbenzene:	ND	ND	25.
Xylenes:	0.21	ND	ND
MTBE:	ND	ND	17

file: 22029.c&n\Figures\4-soil&gw

FIGURE
3
Job #
22029.B

SOIL AND GROUNDWATER ANALYTICAL RESULTS

C&N Tractors
496-498 Salinas Road
Watsonville, California

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100



Explanation

MW-4
Elevation: 258.55'
TPH-g: 76,000 ppb
B: 23,000 ppb
T: 1,600 ppb
E: 1,600 ppb
X: 1,100 ppb
MTBE: < 3 ppb
D.O.: 0.05 ppm



Groundwater Monitoring Well (MW) location, designation, groundwater elevation, and analytical results

Analytical Results are in ug/L, parts per billion (ppb)

Samples Analyzed for:

Total Petroleum Hydrocarbons as Gasoline (TPH-g),
Benzene (B),
Toluene (T),
Ethylbenzene (E),
Xylenes (X),
Methyl Tert Butyl Ether (MTBE)

Dissolved Oxygen (D.O.) was measured in the field and is presented in mg/L, parts per million (ppm)

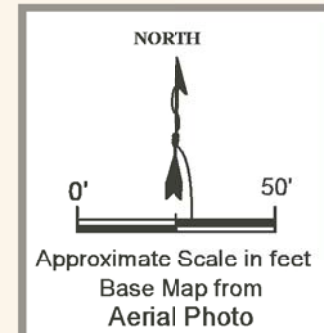
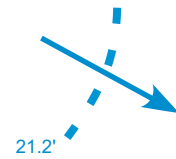
* = Laboratory indicates results possibly aged gasoline.

< X = Analyte not detected above laboratory detection limit, X

Groundwater elevation contours, and flow direction.

Groundwater gradient measured on October 19, 2005 was 0.001 ft/ft to the southwest.

Notes: Monitoring well MW-1 was installed in 1987. Monitoring wells MW-2, 3, & 4 were installed on January 25, 2005. Well elevations were professionally surveyed by McGregor Land Surveys on February 16, 2005, License # 5946.



Agricultural
Fields

Tractor Sales
& Office

Salinas Road

Asphalt Lot
Open Air Tractor Storage

Repair
Shop

MW-1

Elevation: 17.30'
TPH-g: 60 ppb
B: ND
T: ND
E: ND
X: ND
MTBE: ND
D.O.: 0.14 ppm

Former Underground Gas Tank
(550-gallon, Removed: April 1987)

MW-3

Elevation: 17.20'
TPH-g: ND
B: ND
T: ND
E: ND
X: ND
MTBE: ND
D.O.: 0.16 ppm

MW-2

Elevation: 17.31'
TPH-g: ND
B: ND
T: ND
E: ND
X: ND
MTBE: ND
D.O.: 0.12 ppm

MW-4

Elevation: 17.15'
TPH-g: ND
B: ND
T: ND
E: ND
X: ND
MTBE: 11 ppb
D.O.: 0.12 ppm

Parts &
Storage

Fabrication
Shop

Access Roads

Active Fuel Leak Site
(former railroad yard)
8 Groundwater Monitoring Wells

22029.C&NMQM200514q05Site map 4q05.crv

FIGURE
2
Job #
22029

Groundwater Monitoring Results
October 19, 2005
C&N Tractors
496-498 Salinas Road
Watsonville, California

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100



ATTACHMENT E:

Geologic logs, including construction, for all wells:

E-1: Geologic Logs of Hydraulic Driven Geo-Probe Borings DP-1 through DP-6

E-2: Geologic Log of Monitoring Wells MW-2, 3, & 4.



GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 22029

DATE: June 19, 2003

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Watsonville, Monterey County

LOGGED BY: A. Bierman

DRILLER: Enprobe Drilling (Jeff Edmond)

DRILL METHOD: Hydraulic Driven Large-Bore & Macro-Core Probes

BORING #

DP-1

Sheet
1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & OVA Data (ppmV)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						----	Asphalt underlain by 3/4-inch baserock.
1							
2			DP-1a @ 1.5 ppm			GW-G	Gravelly, Clayey SAND , greenish black (2.5/1 5GY) soft to loose, 30% fine subrounded gravels, 30% clay fines, 40% fine to medium sands, slight HC odor, gradational contact.
3			@3' bgs - 1 ppm			CL	Lean CLAY , very dark gray (2.5Y 3/1), dry, firm, high plasticity, non sticky, 10% fine sands, trace odor, no discoloration.
4							
5							-Formation becomes medium stiff to soft. gradational contact.
6			DP-1b @ 0 ppm			SM	Sandy SILT , dark greenish gray (2.5/1 5GY), moist, very soft, medium plasticity, non sticky, 10% fine sands, 90% silts, no odor, no discoloration, gradational contact
7			DP-1 @ 7' obtained using disposable bailer in 0.010 slotted screen	First GW@ 7.0' bgs		SM	Silty SAND , olive gray (5Y 4/2), wet, very soft, medium plasticity, slightly sticky, rapid dilatancy, no odor, no discoloration -Groundwater first encountered at 7 feet bgs. -Gradational contact.
8							
9						CH	Fat CLAY , grayish brown (2.5 YR 4/2) with olive brown mottling (2.5Y 4/4), moist, soft to firm, high plasticity, non sticky, no HC odor, discolored.
10			DP-1c @ 0 ppm			CL	Lean CLAY , grayish brown (2.5 YR 4/2) with olive brown (2.5Y 4/4) mottling, dry, hard, non plastic, non sticky, no HC odor, no discolor. unit acting as aquitard.
11							
12							
13							-Boring terminated at 12 feet bgs.
14							-Grout boring with Portland cement to ground surface.
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 22029

DATE: June 19, 2003

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Watsonville, Monterey County

LOGGED BY: A. Bierman

DRILLER: Enprobe Drilling (Jeff Edmond)

DRILL METHOD: Hydraulic Driven Large-Bore & Macro-Core Probes

BORING #

DP-2

Sheet
1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & OVA Data (ppmV)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						----	Asphalt underlain by 3/4-inch baserock.
1							
2			DP-2a @ 1.0 ppm			GW-GC	Gravelly, Clayey SAND , greenish black (2.5/1 5GY) soft to loose, 30% fine subrounded gravels, 30% clay fines, 40% fine to medium sands, slight HC odor, gradational contact.
3			@4' bgs - 1.0 ppm			CL	Lean CLAY , very dark gray (2.5Y 3/1), dry, firm, high plasticity, non sticky, 10% fine sands, trace odor, no discoloration, becomes soft with depth, gradational contact.
4							
5						SP-SM	Sandy SILT , dark greenish gray (2.5/1 5GY), moist, very soft, medium plasticity, non sticky, 10% fine sands, 90% silts, no odor, no discoloration, gradational contact
6							
7			DP-2b @ 0.5 ppm				
8			DP-2 @ 7' obtained using disposable bailer in 0.010 slotted screen	First GW @ 7.0' bgs		SM	Silty SAND , olive gray (5Y 4/2), wet, very soft, medium plasticity, slightly sticky, rapid dilatancy, no odor, no discoloration -Groundwater first encountered at 7 feet bgs.
9							
10							-Gradational contact.
11			DP-2c @ 0 ppm			CH	Fat CLAY , grayish brown (2.5 YR 4/2) with olive brown mottling (2.5Y 4/4), moist, soft to firm, high plasticity, non sticky, no HC odor, discolored.
12						CL	Lean CLAY , grayish brown (2.5 YR 4/2) with olive brown (2.5Y 4/4) mottling, dry, hard, non plastic, non sticky, no HC odor, no discolor, unit acting as aquitard.
13							
14							-Boring terminated at 12 feet bgs. -Grout boring with Portland cement to ground surface.
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 22029

DATE: June 19, 2003

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Watsonville, Monterey County

LOGGED BY: A. Bierman

DRILLER: Enprobe Drilling (Jeff Edmond)

DRILL METHOD: Hydraulic Driven Large-Bore & Macro-Core Probes

BORING #

DP-3

Sheet
1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & OVA Data (ppmV)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						----	Asphalt underlain by 3/4-inch baserock.
1							
2			DP-3a @ 50 ppm			GW-GC	Gravelly, Clayey SAND , greenish black (2.5/1 5GY) soft to loose, 30% fine subrounded gravels, 30% clay fines, 40% fine to medium sands, moderate to strong HC odor, gradational contact.
3			@4' bgs - 60 ppm			CL	Lean CLAY , very dark gray (2.5Y 3/1), dry, firm, high plasticity, non sticky, 10% fine sands, moderate odor and discolored.
4							
5							-Formation becomes medium stiff to soft, gradational contact.
6			DP-3b @ 70 ppm			SP-SM	Sandy SILT , dark greenish gray (2.5/1 5GY), moist, very soft, medium plasticity, non sticky, 10% fine sands, 90% silts, moderate odor, no discoloration, gradational contact
7			DP-3 @ 7' obtained using disposable bailer in 0.010 slotted screen				
8			@ 8' bgs -700 ppm	First GW@ 7.0' bgs		SM	Silty SAND , dark greenish gray (2.5/1 5GY), wet, very soft, medium plasticity, slightly sticky, rapid dilatancy, very strong odor, discolored.
9							-Groundwater first encountered at 7 feet bgs.
10			DP-3c @ 3 ppm			CH	-Gradational contact.
11						CL	Fat CLAY , dark greenish gray (2.5/1 5GY), with grayish brown (2.5 YR 4/2) with olive brown (2.5Y 4/4) mottling, and trace dark bluish gray(4/1 5B) mottling, moist, soft to firm, high plasticity, non sticky, low to no HC odor, discolored.
12							Lean CLAY , grayish brown (2.5 YR 4/2) with olive brown (2.5Y 4/4) mottling, and trace dark bluish gray(4/1 5B) mottling, dry, hard, non plastic, non sticky, no HC odor, no discolor, unit acting as aquitard.
13							
14							-Boring terminated at 12 feet bgs.
15							-Grout boring with Portland cement to ground surface.
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 22029

DATE: June 19, 2003

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Watsonville, Monterey County

LOGGED BY: A. Bierman

DRILLER: Enprobe Drilling (Jeff Edmond)

DRILL METHOD: Hydraulic Driven Large-Bore & Macro-Core Probes

BORING #

DP-4

Sheet
1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & OVA Data (ppmV)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						----	Asphalt underlain by 3/4-inch baserock.
1							
2			DP-4a @ 3 ppm			GW-GC	Gravelly, Clayey SAND , greenish black (2.5/1 5GY) soft to loose, 30% fine subrounded gravels, 30% clay fines, 40% fine to medium sands, trace HC odor, gradational contact.
3			@4' bgs - 3 ppm			CL	Lean CLAY , very dark gray (2.5Y 3/1), dry, firm, high plasticity, non sticky, 10% fine sands, trace to no odor, no discoloration.
4						SP-SM	-Formation becomes soft at 4 feet, gradational contact.
5							Sandy SILT , dark greenish gray (2.5/1 5GY), moist, very soft, medium plasticity, non sticky, 10% fine sands, 90% silts, trace odor, no discoloration, gradational contact
6			DP-4b @ 10 ppm				
7			DP-4 @ 7' obtained using disposable bailer in 0.010 slotted screen			SM	Silty SAND , dark greenish gray (2.5/1 5GY), wet, very soft, medium plasticity, slightly sticky, rapid dilatancy, low HC odor, discolored??
8			@ 8' bgs - 2 ppm	First GW @ 7.0' bgs			-Groundwater first encountered at 7 feet bgs.
9							
10			DP-4c @ 0 ppm			CH	-Gradational contact,
11						CL	Fat CLAY , dark greenish gray (2.5/1 5GY), very moist, soft, high plasticity, non sticky, no HC odor, discolored
12							Lean CLAY , grayish brown (2.5 YR 4/2) with olive brown (2.5Y 4/4) mottling, and trace dark bluish gray(4/1 5B) mottling, dry, hard, non plastic, non sticky, no HC odor, no discolor, unit acting as aquitard.
13							
14							-Boring terminated at 12 feet bgs.
15							-Grout boring with Portland cement to ground surface.
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 22029

DATE: June 19, 2003

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Watsonville, Monterey County

LOGGED BY: A. Bierman

DRILLER: Enprobe Drilling (Jeff Edmond)

DRILL METHOD: Hydraulic Driven Large-Bore & Macro-Core Probes

BORING #

DP-5

Sheet
1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & OVA Data (ppmV)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						----	Asphalt underlain by 3/4-inch baserock.
1							
2			DP-5a @ 20 ppm			GW-GC	Gravelly, Clayey SAND , greenish black (2.5/1 5GY) soft to loose, 30% fine subrounded gravels, 30% clay fines, 40% fine to medium sands, low HC odor, gradational contact.
3			@4' bgs - 60 ppm			CL	Lean CLAY , very dark gray (2.5Y 3/1), dry, firm, high plasticity, non sticky, 10% fine sands, low to moderate HC odor, no discoloration.
4						SP-SM	-Formation becomes soft at 4 feet, gradational contact.
5							Sandy SILT , dark greenish gray (2.5/1 5GY), moist, very soft, medium plasticity, non sticky, 10% fine sands, 90% silts, trace odor, low to moderate odor, discolored, gradational contact
6			DP-5b @ 60 ppm				
7			DP-5 @ 7' obtained using disposable bailer in 0.010 slotted screen			SM	Silty SAND , dark greenish gray (2.5/1 5GY), wet, very soft, medium plasticity, slightly sticky, rapid dilatancy, moderate HC odor, discolored??
8			@ 8' bgs- 8 ppm	First GW @ 7.0' bgs			-Groundwater first encountered at 7 feet bgs.
9							
10			DP-5c @ 1 ppm				-Gradational contact.
11						CH	Fat CLAY , dark greenish gray (2.5/1 5GY), very moist, soft, high plasticity, non sticky, low to no HC odor, discolored
12				Aquitard		CL	Lean CLAY , grayish brown (2.5 YR 4/2) with olive brown (2.5Y 4/4) mottling, and trace dark bluish gray(4/1 5B) mottling, dry, hard, non plastic, non sticky, no HC odor, no discolor, unit acting as aquitard.
13							
14							-Boring terminated at 12 feet bgs.
15							-Grout boring with Portland cement to ground surface.
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 22029

DATE: June 19, 2003

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Watsonville, Monterey County

LOGGED BY: A. Bierman

DRILLER: Enprobe Drilling (Jeff Edmond)

DRILL METHOD: Hydraulic Driven Large-Bore & Macro-Core Probes

BORING #

DP-6Sheet
1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & OVA Data (ppmV)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						----	Asphalt underlain by 3/4-inch baserock.
1							
2			DP-6a @ 0 ppm			GW-G	Gravelly, Clayey SAND , greenish black (2.5/1 5GY) soft to loose, 30% fine subrounded gravels, 30% clay fines, 40% fine to medium sands, no HC odor, gradational contact.
3							
4			@4' bgs - 0 ppm			CL	Lean CLAY , very dark gray (2.5Y 3/1), dry, firm, high plasticity, non sticky, 10% fine sands, no odor, no discoloration. -Formation becomes soft. gradational contact.
5							
6			DP-6b @ 0 ppm			SM	Sandy SILT , dark greenish gray (2.5/1 5GY), moist, very soft, medium plasticity, non sticky, 10% fine sands, 90% silts, no odor, no discoloration.
7							-Gradational contact
8			DP-6 @ 7' obtained using disposable bailer in 0.010 slotted screen	First GW@ 7.0' bgs		SM	Silty SAND , olive gray (5Y 4/2), wet, very soft, medium plasticity, slightly sticky, rapid dilatancy, no odor, no discoloration -Groundwater first encountered at 7 feet bgs. -Gradational contact.
9							
10						CH	Fat CLAY , grayish brown (2.5 YR 4/2) with olive brown mottling (2.5Y 4/4), moist, soft to firm, high plasticity, non sticky, no HC odor, discolored.
11			DP-6c @ 0 ppm			CL	Lean CLAY , grayish brown (2.5 YR 4/2) with olive brown (2.5Y 4/4) mottling, dry, hard, non plastic, non sticky, no HC odor, no discolor, unit acting as aquitard.
12							
13							-Boring terminated at 12 feet bgs.
14							-Grout boring with Portland cement to ground surface.
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							



GEOLOGIC LOG

Monitoring Well

JOB NO.: 22029.C

DATE: January 25, 2005

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Pajaro, Monterey County

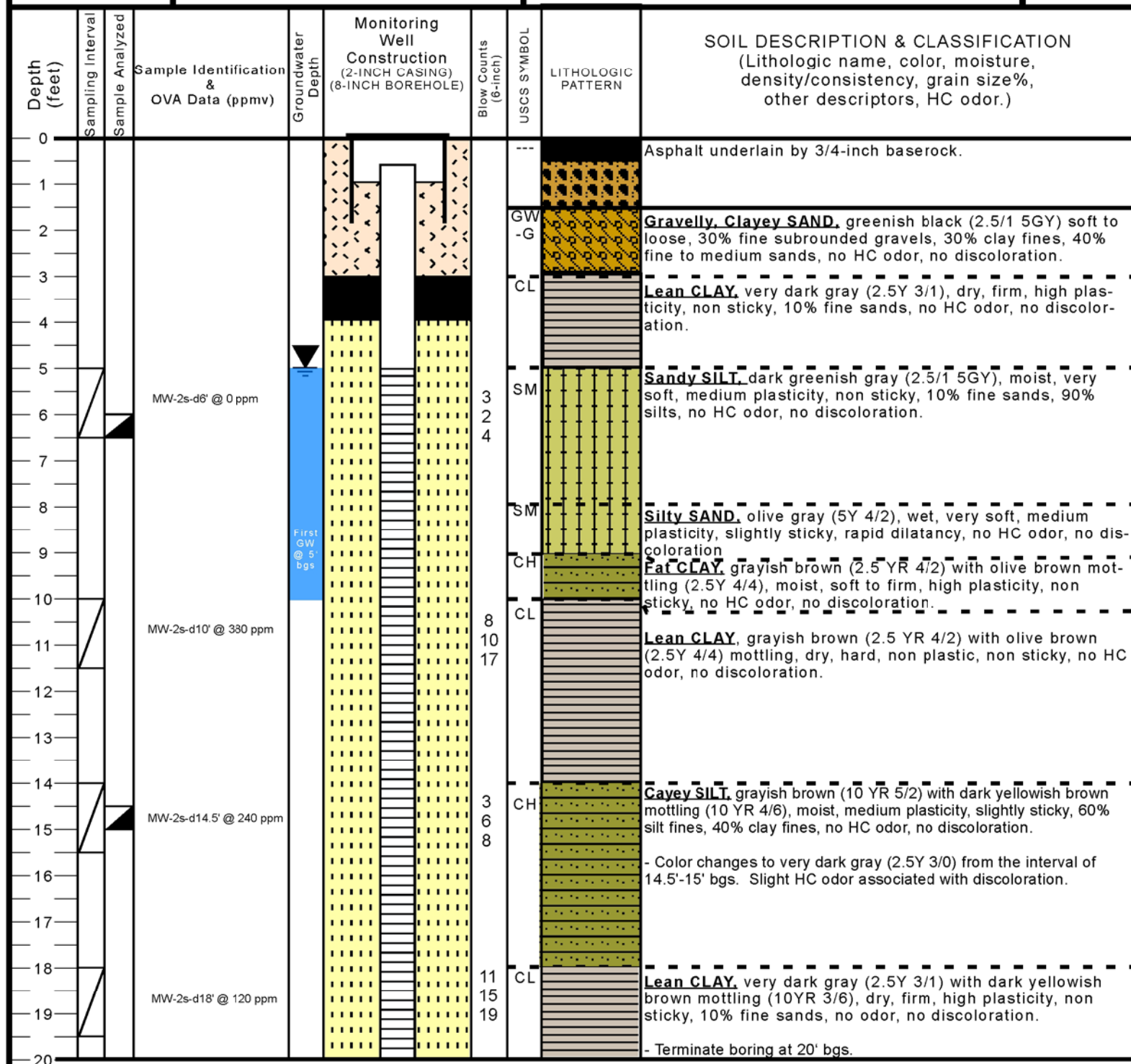
LOGGED & SAMPLED BY: J. Chaney

DRILLER: Exploration Geoservices (Lauren / Jason)

DRILL METHOD: Hollow Stem Auger

BORING #

MW-2

Sheet
1 of 1

- Lithology has been partially interpreted from previous driven probe borings conducted at this site.

-- Construct Monitoring Well as depicted above:

Blank Casing:	0 - 5' bgs
Screened Casing (0.010 slot):	5 - 20' bgs
Cement Seal (Portland):	0 - 3' bgs
Bentonite Seal (3/4-inch chips):	3 - 4' bgs
Sand Pack (#3 Sand):	4 - 20' bgs



GEOLOGIC LOG

Monitoring Well

JOB NO.: 22029.C

DATE: January 25, 2005

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Pajaro, Monterey County

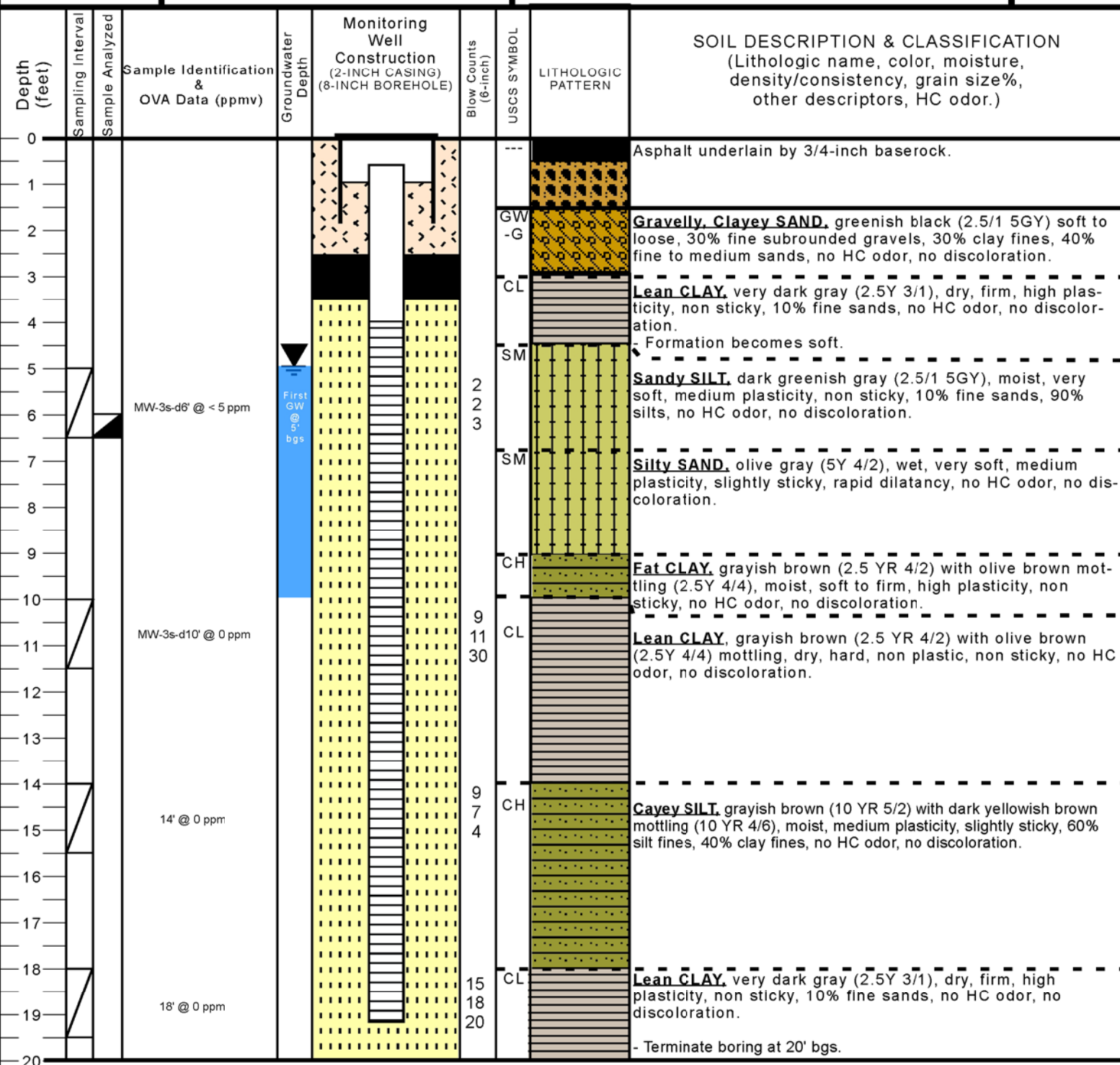
LOGGED & SAMPLED BY: J. Chaney

DRILLER: Exploration Geoservices (Lauren / Jason)

DRILL METHOD: Hollow Stem Auger

BORING #

MW-3

Sheet
1 of 1

- Lithology has been partially interpreted from previous driven probe borings conducted at this site.

-- Construct Monitoring Well as depicted above:

Blank Casing:	0 - 4' bgs
Screened Casing (0.010 slot):	4 - 19' bgs
Cement Seal (Portland):	0 - 2.5' bgs
Bentonite Seal (3/4-inch chips):	2.5 - 3.5' bgs
Sand Pack (#3 Sand):	3.5 - 20' bgs



GEOLOGIC LOG

Monitoring Well

JOB NO.: 22029.C

DATE: January 25, 2005

CLIENT: C & N Tractors

LOCATION: 496-498 Salinas Road, Pajaro, Monterey County

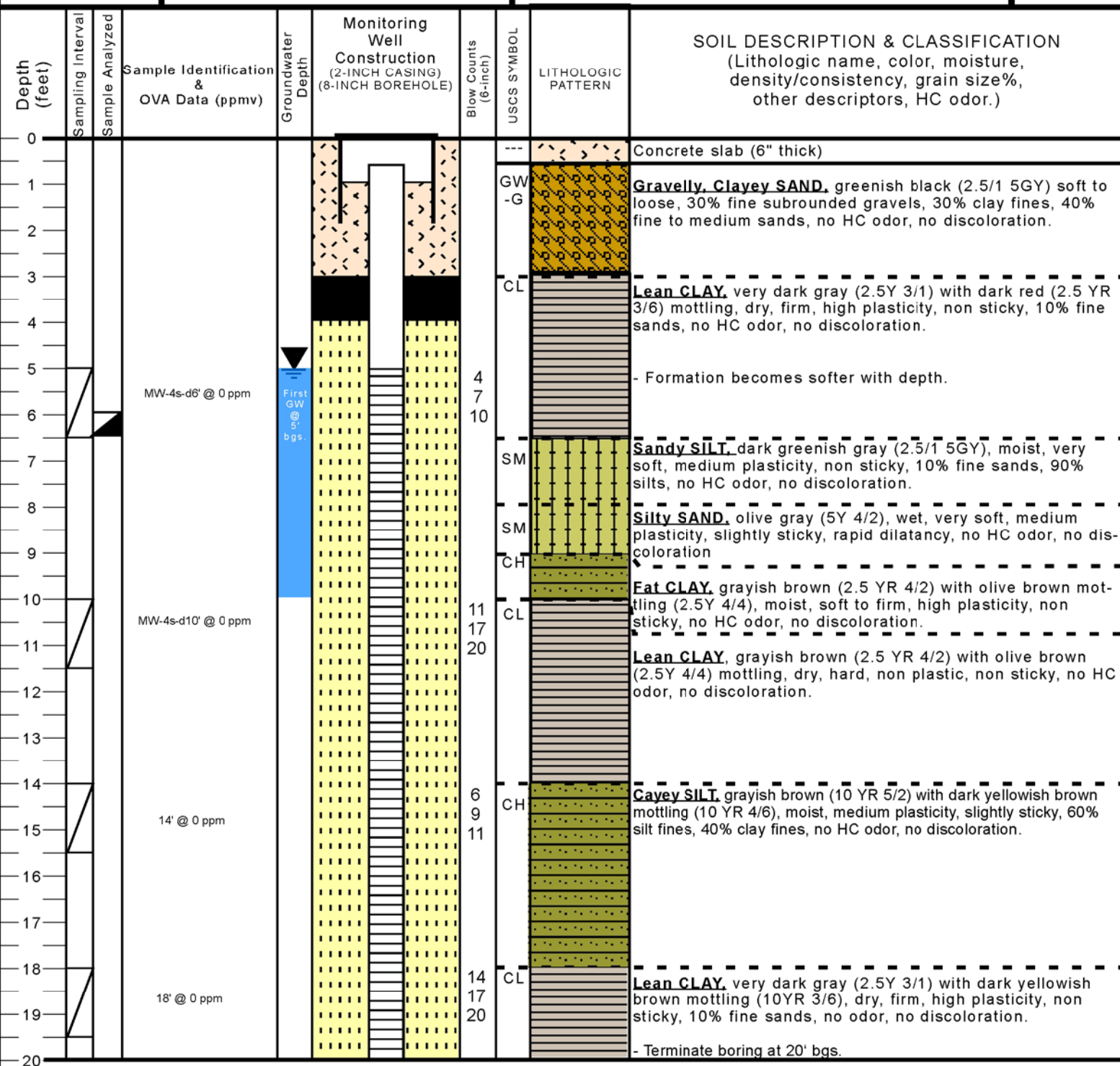
LOGGED & SAMPLED BY: J. Chaney

DRILLER: Exploration Geoservices (Lauren / Jason)

DRILL METHOD: Hollow Stem Auger

BORING #

MW-4

Sheet
1 of 1

- Lithology has been partially interpreted from previous driven probe borings conducted at this site.

-- Construct Monitoring Well as depicted above:

Blank Casing:	0 - 5' bgs
Screened Casing (0.010 slot):	5 - 20' bgs
Cement Seal (Portland):	0 - 3' bgs
Bentonite Seal (3/4-inch chips):	3 - 4' bgs
Sand Pack (#3 Sand):	4 - 20' bgs

ATTACHMENT F:

Groundwater sample analytical results:

F-1: *Table 3: Current Groundwater Sample Results, WHA Shallow Soil and Groundwater Assessment Report dated October 3, 2003*

F-2: *Table 1: Summary of Groundwater Elevation and Analytical Data*

5.1 Groundwater Results (Figure 3): Groundwater samples collected from each of the six driven probe borings and the existing monitoring well and tested for dissolved gasoline (TPH-gas) and constituent gas compounds [benzene, toluene, ethylbenzene and xylenes (BTEX) and Methy-t-butyl Ether (MTBE)]. The results are presented below:

Table 3
CURRENT GROUNDWATER SAMPLE RESULTS
(All water samples collected at a depth of 7', and all lab results in parts per billion, µg/L).

Driven Probe ID #	Laboratory Analysis Results					
	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
DP-1	ND.	ND	ND	ND	ND	ND
DP-2	ND	ND	ND	ND	ND	ND
DP-3	20000	41	ND (<25.)	350	ND (<50.)	ND ⁽¹⁾ (<15. MDL)
DP-4	14000	34	32	ND (<2.5)	ND (<2.5)	1.9 ⁽¹⁾
DP-5	15000	36	ND (<5.)	25	ND (<10.)	17. ⁽¹⁾
DP-6	ND	ND	ND	ND	ND	ND
MW-1	ND	ND	ND	ND	ND	ND
Laboratory PQL:	50	0.5			1	
CRWQCB - Region 3 Water Quality Goals	1000	1	150	300	1,750	5

ND: Not detected. (1): MTBE confirmed by EPA Method #8269.
 < X: Diluted Sample, increased detection limit "X"
 MDL: Minimum Detection Limit (not detected at MDL)

Table 1
Summary of Groundwater Elevation and Analytical Data
C & N Tractors - 496 & 498 Salinas Road, Watsonville, California
Weber, Hayes and Associates

Monitoring Point Information			Date Sampled	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, NGVD)	Petroleum Hydrocarbon Concentration Data						Field Measurements		
Well I.D.	TOC Elevation (feet, NGVD)	Screen Interval (feet, bgs)				Total Petroleum Hydrocarbons	Volatile Organic Compounds					Dissolved Oxygen (mg/L)	Redox Potential (ORP) (mV)	
							Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)			MTBE (ug/L)
MW-1	Δ 25.24	?? - 14'												
			10/19/05	7.94	17.30	65	ND	ND	ND	ND	ND	0.14	15	
			4/12/05	4.27	20.97	**300	ND	0.51	7.5	5.6	ND	0.20	89	
			1/27/05	4.36	20.88	**1,000	ND	ND	22	19	ND	0.14	224	
			9/19/04	7.20	18.04	ND	ND	ND	ND	ND	ND	5.55	-113	
			Dec-98	--	--	5,000	13	16	100	280	< 2.5	--	--	
			Mar-97	--	--	7,500	28	< 25	330	1,200	< 250	--	--	
			Dec-88	--	--	1,100	6.5	28	12	100	--	--	--	
			Feb-88	--	--	840	31	35	8.7	47	--	--	--	
MW-2	25.32	5 - 20												
			10/19/05	8.01	17.31	ND	ND	ND	ND	ND	ND	0.12	105	
			4/12/05	4.49	20.83	ND	ND	ND	ND	ND	***7.5	0.13	73	
			1/27/05	4.57	20.75	ND	ND	ND	ND	ND	6.3	0.78	35	
MW-3	25.39	4 - 19												
			10/19/05	8.19	17.20	ND	ND	ND	ND	ND	ND	0.16	137	
			4/12/05	4.20	21.19	ND	ND	ND	ND	ND	ND	0.21	131	
			1/27/05	4.21	21.18	**27	ND	ND	ND	ND	ND	1.4	0.48	244
MW-4	26.38	5 - 20												
			10/19/05	9.23	17.15	ND	ND	ND	ND	ND	ND	11	0.12	133
			4/12/05	5.23	21.15	ND	ND	ND	ND	ND	ND	***7.6	0.14	124
			1/27/05	5.28	21.10	ND	ND	ND	ND	ND	ND	8.2	0.18	292
Practical Quantitation Limit:						25 / *50	0.5	0.5	0.5	0.5	1	--	--	
Action Levels (ALs) / Maximum Contaminant Levels (MCLs) ¹						1000	1	150	300	1750	5	--	--	

NOTES:

TOC : Top of Casing elevation surveyed by a Licensed Surveyor to National Geodetic Vertical Datum of 1988 (NGVD).

bgs : below ground surface.

ug/L : micrograms per liter - parts per billion.

ND : Not Detected at or above the laboratory's practical quantitation limit (PQL).

BOLD PRINT : Bold Print indicates concentrations are above regulatory Action Levels or MCL's.

* : Laboratory indicates analytical results within quantitation range, but the chromatographic pattern was not the specified fuel.

1: Levels presented are based on either the established Maximum Contaminant Levels (MCLs) which are the California Code of Regulations (Title 22) or water quality goals for the Central Coast Region of the CRWQCB.

♦ : Due to the low level detections of contaminants during the January 27, 2005 sampling event, samples collected on April 14, 2005 were analyzed by EPA Methods 8015M & 8020, and as a result the detection limit for TPH-g is elevated to 50 ppb.

TPH-g: Total Petroleum Hydrocarbons as gasoline

MTBE: Methyl Tert Butyl Ether.

< X: Not Detected at the elevated PQL, X, PQL elevated due to sample dilution.

-- : Data missing, not available, or not collected.

** : Laboratory indicates result is possibly aged gasoline.

***: Confirmed by EPA Method 8260

Δ: McGregor Landsurveys noted an initial reporting error in the top of casing elevation reported for well MW-1. The top of casing elevation for well MW-1 was initially reported to be 25.47 feet, NAVD; the corrected elevation is 25.24 feet, NAVD.